

Inside

The death of Capability Brown 200 years ago and the publication of Colin Buchanan's *Traffic in Towns* 20 years ago are two anniversaries discussed by PATRICK NUTTGENS (page 8).



At the beginning of last term we talked to 20 new students on the brink of their careers in higher education. This week we revisit the GLASS OF '83, concentrating on the particular experiences of four students and discussing with all of them work, money and leisure (pages 10-11).

PRESENCES: the poet and translator Michael Hamburger recalls how he was influenced by the friendships he formed with fellow poets whose work he has translated (page 15).



How Strachan reviews a new study of CLAUSEWITZ by Raymond Aron (above) which he regards as rich, multi-layered and complex - but making great demands on its readers. (page 16).

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The culture of the Met, Peter Moore on university accounting, Ronald Beiner on Michael Walzer's *Spheres of Justice*, Unesco and the United States.

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HIGHER EDUCATION SUPPLEMENT
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New job, new UGC

The next-to-last question of the 28 which the University Grants Committee has asked the universities to consider is one of the most interesting: "Have you any comments on the nature and role of the UGC, or on the way in which it should carry out that role?" It is also one of the few that is both positive and relevant.

Some of the questions, most conspicuously the first three that refer to future cuts, the erosion of the unit of resource, and (questionable) demographic decline, are certainly relevant but almost entirely negative. Others, like those on the nature of universities or the Leverhulme proposals, are more positive but remain largely irrelevant to the immediate issues that face the universities. The question on the UGC itself opens up the prospect not only that something may be done but also that that something may be an improvement.

According to the Treasury minute which established the UGC in 1919 the committee has two jobs, to advise the Government on the needs of the universities (a phrase about taking into account national needs was added in 1946) and then to advise, effectively to determine, how the available grant should be distributed to individual institutions. The UGC is part, although an anomalous part, of the Department of Education and Science. It is staffed by civil servants. Its chairman is formally a second permanent secretary at the DES. Its members are appointed by the Secretary of State, although in practice they emerge on the good old co-optative/oligarchic principle.

Two questions immediately arise. Is the UGC's job description still relevant or even realistic? And are its constitution and administration still appropriate? The first question is difficult to answer because there is a considerable gap between the theory and practice of the UGC's job. Take its duty to advise the Government on the needs of the universities. It is clear that until the beginning of the 1960s the committee was fully effective in that role. The Government took the UGC's word without question on both the amount and distribution of its grant to universities.

But over the past 20 years this happy state of affairs has been eroded to such an extent that today the UGC has almost no special influence over the total amount of the recurrent grant and the Government is taking an unhealthy increasing interest in its distribution. Looking back the Government's refusal to follow the Robbins recommendation to strengthen the UGC (and call it a commission), the introduction of the PESC (Public Expenditure Survey Committee) system in the late 1960s, the move towards cash limits, the growing involvement of the DES in salary determination, were all important stages in this erosion of the UGC's influence in Whitehall.

By the beginning of the 1980s the UGC had been reduced to the status of a privileged lobbyist for the universities. It was no longer a body that advised, but only a small factor in the vast and complex public expenditure machine. No one really expected

the UGC's confidential advice in 1980 that the cuts under consideration would lead to serious dislocation in universities to carry the day. The DES even seems to have mislaid this important memorandum for crucial periods. The Treasury clearly took no notice at all of the UGC warning.

However the UGC in 1981, and perhaps still today, retained the ability to influence secondary and consequential public expenditure judgments. If it no longer had any role in preventive medicine, it still had an important part to play in restorative surgery. So the UGC was able to use its reduced Whitehall influence in 1981/83 to ameliorate the worst effects of the earlier cuts. This influence was crucial in securing the restructuring fund, sorting out the universities' superannuation difficulties, and persuading the Government to introduce the "new blood" scheme. But these secondary successes should not blind us to the primary failure to influence the Government's overall view of the needs of the universities.

The second part of the UGC's job, to distribute the grant to individual universities without interference from the Government, has been similarly but more recently qualified. In 1981 the UGC went ahead with a highly selective distribution of the recurrent grant without reference to the DES. At first the Government seemed to tolerate this independence with faintly supportive indifference. But protests from the vice chancellors of technological universities and the embarrassing spill-over of students into other polytechnics and colleges led to second thoughts.

Sir Edward Parkes survived a difficult encounter with Number 10 unscathed. But it soon became clear that never again would the Government accept that the UGC had the unilateral right to shape the future of the universities by its distribution of the recurrent grant, except within broad policy guidelines laid down by the DES. The outcome is well known - Sir Keith Joseph's letter of September 1 to Sir Edward Parkes and now the great debate initiated by Sir Edward's successor, Sir Peter Swinnerton-Dyer.

The 1981 distribution also left other scars. Both the legitimacy and the competence of the UGC were much less challenged by those universities which suffered the severest cuts. The Association of University Teachers called for a representative universities' council which would operate in a more open manner. The Opposition parties complained that the UGC had acted as the agent of a destructive Government and/or been unaccountable for its decisions (this second complaint has now been turned on its head with the Government being accused of giving extra-constitutional instructions to the UGC). Whatever the justice of these complaints or the validity of these proposals for reform, their effect has been to undermine the universities' confidence in the UGC.

So the UGC has lost its role as the authoritative source of advice to Government about the needs of the

universities, although it can still do a valuable job as dignified lobbyist and as a consultant on emergency repairs. Its freedom to distribute the recurrent grant without further reference to the Government is also being constrained. At the same time its reputation in the universities has become more ambiguous. Too many people are not sure whether the UGC is their ally or their enemy.

As a result the UGC is faced with the need to make two crucial adjustments to its traditional role. First, it must come to terms with the fact, however unpalatable, that in future the DES will advise the UGC for more often than the other way round. Second, it must reinforce, or possibly rebuild, its legitimacy and competence in the eyes of the universities.

The UGC, like the god after which this month is named, has always had to face both ways, to Whitehall and to the universities. In the past its relationship with Whitehall has probably been more crucial than its relationship with individual universities. In the future this priority may be reversed. The tasks which the committee will have to undertake in the 1980s and 1990s may depend for their successful completion much less on knowledge of the networks of Whitehall and much more on immersion in the detailed operation of the university system.

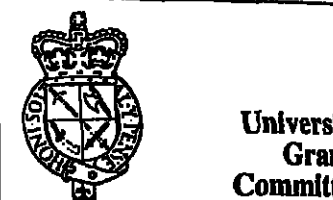
The UGC is likely to have less and less to do with the initial determination of the universities' share of public expenditure and may have to share with the DES its previously exclusive prerogative to distribute the recurrent grant. But it will have more and more to do with detailed negotiations with universities - about restructuring, about "new blood", about the future of the dual support system for research, and so on.

To do this new job we may need a new kind of UGC. In particular the committee's present status as a peripheral part of the Whitehall machine will look increasingly slight. The alternative advantages of establishing the UGC as an independent agency will appear more and more attractive. This will have special implications for its staff. At present they are civil servants, because civil servants know the ways of Whitehall.

But civil servants inevitably know much less about universities. If Whitehall wisdom is less important and detailed knowledge of universities more important, the case for changing the character of the UGC's staff becomes much stronger. Although it is important to argue that some civil service links should be retained, it is important to bring in many more outsiders - or rather insiders - most obviously from university administration and at a senior level.

Both reforms, giving off the UGC from the DES and hiring an independent staff, might help the committee to adapt to its changed role and revitalize what is still a truly valuable, even crucial institution. Both may be more significant than merely adding to the membership of the committee itself. We should remember: to administer is to govern, and to govern is to rule.

Laurie Taylor



University Grants Committee

14 Park Crescent, London W1N 4DH

To all Vice Chancellors and Principals.

Our Reference: Circular Letter 17, January 6, 1984
Dear Vice Chancellor/Principal,

DEVELOPMENT OF A STRATEGY FOR HIGHER EDUCATION INTO THE 1990s

1. You will probably have already spent some time digesting the contents of my letter to you of the 1st November 1983.

2. Actually I thought it was quite a good letter.

3. All things considered.

4. But enough of that.

5. You will no doubt have noticed, or at least have had your attention drawn to the matter, that the letter, although claiming to contain 29 Questions relating to Higher Education in the 1990s, in reality only listed 28.

6. It seems that an administrative error was responsible for the omission of Question 22.

7. This should have been included under Paragraph 24.

8. That's Paragraph 24.

9. At the bottom of Page 7 and immediately after Question 21. And of course immediately preceding Paragraph 25 and Question 23.

10. To which it relates.

11. It may therefore be helpful to remind you of the substantive context within which Question 22 should have appeared. You will recall that Question 21 asked:

12. Would you favour reducing the retiring age to 60, with the possibility of extending some academic staff beyond 60 on a non-tenured basis?

13. And Question 23:

14. Should the tenure provisions be the same in all universities? If so, what should they be? If not, would there be any long-term consequences?

15. Appropriately enough, therefore, the missing Question 22 also deals with staffing arrangements in the coming years. Specifically, it asks:

16. What would your reaction be to a trial scheme in which senior members of university departments which attracted declining numbers of applicants were asked, under strictly supervised conditions to undertake a short endurance test involving the successful negotiation of a small lake inhabited entirely by piranha fish?

17. I do hope that this now makes the general import of that particular section of my letter a little clearer to you and yours.

18. Best wishes for the New Year to you and yours.

19. Yours sincerely,

20. Peter

21. Swinnerton-Dyer

22. Dyer

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Liverpool poly heads for crisis

by Karen Gold

Liverpool Polytechnic is heading for the most serious crisis in its 14-year history following two new setbacks this week.

The Council for National Academic Awards has withdrawn full or part validation from two key courses. City council representatives on the governing body have urged the rector and his deputy to take early retirement as part of their continuing campaign to reshape the polytechnic to meet Liverpool's urgent needs.

Dr Gerald Bulmer, the rector, and Dr Charles Atkinson, the deputy rector, have both been in their posts since 1970. Dr Bulmer has had discussions with the polytechnic governors, city council members and Liverpool's director of education. Those discussions included his future, he said.

The move comes as the two courses lost full or part validation by the CNAA only weeks after the National Advisory Board ordered the town planning course to stop recruiting.

The BA (Hons) fine art, the only course in the fine art department, has been forbidden to take new students this year unless it regains validation, following rejection of its amended resubmission to the CNAA.

The physics department has lost the honours stream of its BSc applied physics from autumn this

year. This course was criticized for its insufficient staff research for an honours course. Both were under-resourced, according to the CNAA.

The CNAA will shortly consider the polytechnic's new academic plan, submitted at the end of last year following a threat from the council that failure to submit might mean the loss of institutional validation.

Mr Dominic Brady, chairman of Liverpool's education committee and a town planning student at the polytechnic, said that the governors of the polytechnic had consulted with Dr Bulmer and the rectorate staff "with a view to solving some of the internal and administrative problems of the polytechnic".

"The conclusions of these negotiations could well mean that Dr Bulmer may well leave the polytechnic some time this year," he said. "Mindful of the fact that there needs to be changes and a new direction given to the polytechnic, it was felt by a number of people in the polytechnic that there needs to be a look at the future of the polytechnic under Dr Bulmer's direction."

"But it would be preempting any final decision that needs to be made [to say] that the rector would automatically be leaving the polytechnic this year," he added.

Much of the polytechnic's troubles stemmed from the lengthy period when Liverpool had a hung city council, which was reflected in the polytechnic's

governors, Mr Brady said. After the Labour party gained overall control of the city in last May's local elections, all the political seats on the governing body were filled with Labour nominees.

"The implication that an individual has been completely responsible for all the difficulties the polytechnic has had... I would reject," Mr Brady added. "We have just discussed long-term strategy and the role of individuals in that strategy, revolving around issues apart from other things, to try and assist the polytechnic and its wider role in the city of Liverpool."

The governing body of the polytechnic has called for a full management report on all successful and unsuccessful submissions of courses to the CNAA in the last 12 months and on all due in the next 12 months. It hopes to forestall future problems and to see if the polytechnic needs a stronger course monitoring structure.

The governing body also played a large part in writing the academic plan now with the CNAA, which outlines the polytechnic's development into a "comprehensive" college with courses at all levels and replacement courses closely tied to the city's needs and interests.

It also commits the polytechnic to provision in all subject areas, rather than the increasing emphasis on technology in recent years, during which 40 per cent of all departments have been under threat of closure.

Council plans four-year PhDs in social sciences

by Paul Flather

Radical proposals which could lead to the creation of new four-year PhD in the social sciences - including a first year given over to a taught methods course - are now being considered. The proposals, revealed at a conference of social science learned societies last week, are part of a shake-up of the ways postgraduate awards are made by the Economic and Social Research Council.

The council has already invited universities to make bids to run new US-style PhDs involving taught methods work. Now concern that they may be regarded as "second rate" has led ESRC officers to consider four-year awards, allowing for a normal PhD to follow a year of taught work.

Mrs Cathy Cunningham, ESRC deputy secretary, told the annual general meeting of the Association of Learned Societies in the Social Sciences at Imperial College, London, that the council was very interested to hear what universities thought of the idea. The council is now planning:

● To give 350 "open competition" awards this year to top students regardless of the institution they choose for their work.

● To give 450 "committee awards" this year, allocated by the six standing committees, including awards "link-

ed" to running projects, and collaborative awards.

● To invite bids until the end of February for new US-style PhD programmes.

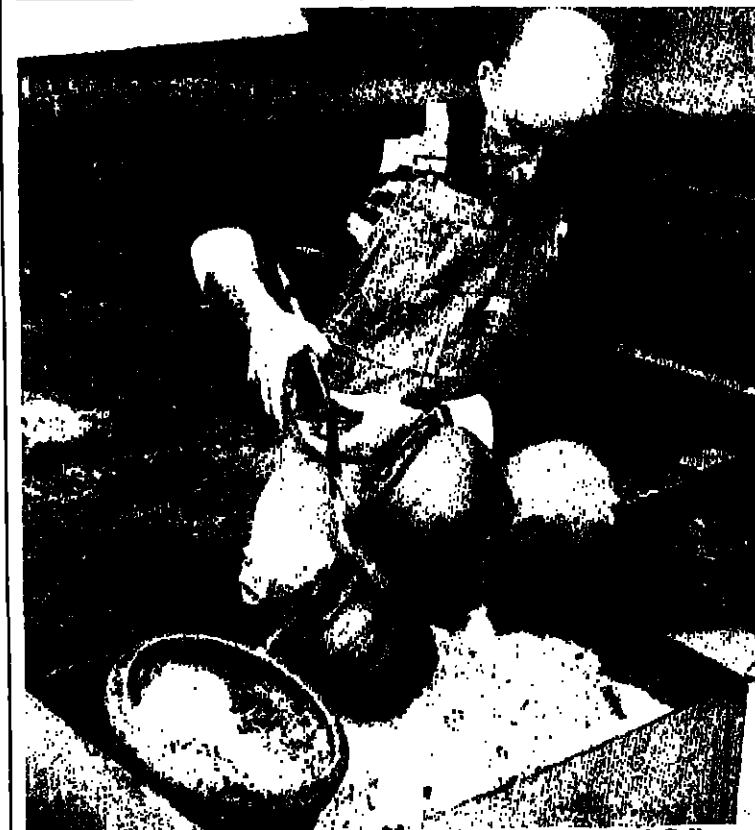
● New "part awards" this year involving some grant money topped up by loans or savings for students in the London and Manchester Business schools.

● To investigate proposals for four-year PhD programmes.

Mrs Cunningham freely admitted that the new emphasis on "open competition" awards, specifically requested by Sir Keith Joseph, the Secretary of State for Education following the Rothchild inquiry, would undermine the council's control over postgraduate training.

The council would lose control over the content, variety and distribution of courses; though she confirmed there would be a full review after three years looking at subject distribution, concentration in institutions, the quality of the intake, and of the research and training, and submission rates.

Sir Peter Swinnerton-Dyer, chairman of the University Grants Committee told the conference the social science PhD still needed to be reformed so that it became a manageable piece of work possible in three years' research; or funding arrangements should be changed.



Jim Robinson, senior lecturer in ceramics at Bretton Hall College of Higher Education, makes a pot the Viking way. Mr Robinson has been appointed advisor on ceramics at the New Norvik Viking Museum, due to open in York later this year as a reconstruction of village life.

Cuts prepare voluntary colleges for NAB takeover

by Patricia Santinelli

Two per cent average cuts in the gross expenditure of the voluntary sector announced by the Department of Education and Science mask major reductions of up to 13 per cent for four voluntary colleges.

Another five colleges have had their grant allocations increased by up to 20 per cent in a DES exercise to reduce the sector's gross expenditure over the two years and get it ready for entry into the National Advisory Body.

The worst affected colleges are Homerton (13 per cent), Liverpool Institute and Westminster Institute (8.5 per cent) and St Mary's Twickenham (9 per cent). Christchurch College's grant is to increase by 20 per cent and Westhill, La Sainte Union, St

Martin's and Chester colleges' grants also increase but to a lesser extent.

The remaining seven out of the 16 voluntary colleges affected also get reductions. In their grants ranging below 2 per cent and up to 8 per cent, with the exception of Ripon and York St John whose grants remain the same.

The exercise did not involve the three jointly funded colleges, nor Goldsmiths' or De La Salle and Newman.

In total the cuts and increase will achieve a 2 per cent cut of £1m on the voluntary sector's grant allocation of less than £50m for 1985.

According to the DES it will also ensure that the voluntary colleges' grants are in line with those set in the maintained sector by the NAB.

Homerton and the three other colleges were cut back because on this basis they were over resourced, while Christchurch and the four other colleges which obtained an increase were under resourced.

The department decided not to set the number of academic staff that each institution should have after taking advice. Nevertheless it admits that its cuts on gross expenditure for tuition are intended to force reduction in this area rather than in non-salary ones.

In its letter to colleges it points out that it is hoped to provide additional resources of around £1m in 1984/85 for a central fund to assist them with the cost of redundancies and restructuring.

Homerton College says that it will

be forced to make cuts in academic staff of about four in 1984/85 as well as non-teaching staff.

Westminster College, according to the DES, will be unable to cut staff and therefore will be forced to implement its 8.5 per cent cut across other areas.

The funding of the voluntary colleges may be radically altered following a survey which shows that the Department of Education and Science is losing some £100,000 under current arrangements.

At present the DES pays colleges their maintenance grants in advance and these are handed until required. Arthur Andersen & Co, the firm of accountants which conducted the survey, says that some £100,000 could be saved if all colleges agreed one set pay day for wages and salaries.

Letters to the editor

CNAAs' role in the validation partnership

Sir, - One aspect of the proposal that the Council for National Academic Awards shall in the future rank courses for the National Advisory Body has so far been overlooked. Its effect on what is intended to be the future shape of CNAAs' national role, namely, "Partnership in Validation".

Besides striking at the roots of existing course validation, this proposed ranking of courses by the CNAAs will also destroy the foundation upon which the future "Developments in Partnership in Validation" are being built. That foundation is the periodic review of validated courses or, more precisely, course evaluation.

To proceed beyond threshold course validation - in which a course is either validated or not validated - to qualitative comparisons between comparable courses in different institutional contexts will require the kind of information only available from detailed course evaluation reports. However, course evaluation is already a notoriously fragile process which can easily

be inhibited within institutions if the teaching staff (and their students) feel that the management is likely to use honest and thorough course evaluation reports as evidence against their courses when the next round of cuts or "rationalization" occurs. The response to such threats, whether real or imagined, is for the teachers and course leaders to conceal as far as possible from public scrutiny any significant problems discovered during course evaluation. This process does not mean that they will not try to solve the problems, it merely means that they will have the political good sense not to publicise those problems. In such circumstances, evaluation reports tend to become cosmetic exercises designed to draw attention to insignificant issues only in order to avoid any suggestion that the course does not already belong to the highest ranks of courses within the institution.

If there is already such danger to course evaluation reports within institutions, how much greater is that presented by a policy of ranking courses by the CNAAs itself for the NAB's purpose of closing courses or even institutions. Such a policy would tend to replace genuine course evaluation reports with cosmetic reports. Consequently, if genuine course evaluation reports are eliminated, "Developments in Partnership in Validation" - which fundamentally depend upon them - will be in danger of being destroyed.

Yours faithfully,
H. WEBSTER
Director,
Edge Hill College of Higher Education, Ormskirk, Lancashire.

Sir, - Dr Peter Knight is of course entitled to express whatever views he wishes about the CNAAs ("Ranking would lead to corporate state" (THESE December 23)). What he is not entitled to do is to claim to be speaking for the system as a whole. I am sure that I am not alone in repudiating his statement that, "no one in the system likes the

CNAAs...

The CNAAs have made an enormous contribution to maintaining and enhancing quality in public sector higher education over the years. In recent months, it has wrestled in a very open and honest way with the problems and dilemmas involved in defining its relationship with the National Advisory Body. In your issue of December 16 you quoted a CNAAs officers' paper as saying that "the council could not, in the public interest, refuse to cooperate by giving advice on quality to NAB..." That conclusion may or may not be correct but it is certainly one that merits serious and sympathetic consideration and certainly does not merit the sort of incoherent attack made by Dr Knight. I for one hope that Dr Knight will not be successful in "inciting people to an insurrection against the CNAAs".

Yours sincerely,
P. F. TORODE
Academic Registrar,
Newcastle upon Tyne Polytechnic.

Does three go into four?

Sir, - We are told in your editorial "Three into two?" (THESE, December 30) that "if students are only two years rather than three, a third more places become available". This is not true: there would be 50 per cent more places available. A college or university with 3,000 on three-year courses has an entry of 1,000 p.a. With two-year courses and the same total number, the entry would be 1,500.

It is perhaps easier and more relevant to realize that if half of the present entry were to follow two-year courses and the other half four-year courses, the total number entering and graduating each year would be the same. Each year the number of two-year graduates would be the same as the number of four-year graduates. Of those in residence, two thirds would be on four-year courses and one third on two-year courses.

The cost would be almost the same, but the overall academic efficiency would be enhanced provided it were true that within the present three-year courses there are enough students who are more suited to two-year courses, and also enough subjects that increasingly require four-year courses as an introduction to effective application in research, development and production.

If either or both of these be true, does it not also imply that there should be more two-year than four-year courses in the arts and more four-year than two-year courses in science and engineering? Yours faithfully,
E. J. BURGE
Professor of physics,
University of London.

Sir, - The recent circular letter 1983 from Sir Peter Swinnerton-Dyer to vice-chancellors gives evidence that the Department of Education and Science intends to maintain its policy of shifting the balance of student numbers in higher education towards science and technology. I hope this policy will be widely questioned.

It is based, I presume, on the hypothesis that national economic prosperity is linked to the proportion of science and engineering graduates in the community. It is far from obvious that this country's problems are exclusively economic, rather than social; or that the principal aim of the higher education system should be to train rather than to educate. But it seems to me that the policy can be said already to have failed in its intent, as judged on its own ground. The appendix to Volume 10 of the Leverhulme Studies Response to Adversity reports that "the British percentage of courses leading to degrees in science and technology (excluding health studies) was significantly higher throughout the 1970s than in virtually all the other Western European countries and the USA (close to 40 per cent in the UK as against 20-30 per cent elsewhere)". This has not led to any noticeable relative improvement in economic performance. The policy has already had a good run for its (not inconsiderable) money; is it not high time it was abandoned?

Yours faithfully,
HARRY A. LEWIS
2 Headingly Terrace,
Leeds.

Social work

Sir, - Your response to Her Majesty's Inspectorate's reports has now become entirely predictable that it is possible to prepare a reply well in advance of your published comments on the inspection of the Certificate of Qualification for Social Work course at this polytechnic. What you omit is the recognition of some special factors affecting the course at the time of their visit. Only passing reference is made to the positive comments which formed the bulk of the report and none at all to the innovative aspects of the course that received special commendation from the HMI's.

Yours sincerely,
POLINA A. HURST
Principal Lecturer in Social Work,
Bristol Polytechnic.

Reports delayed at SERC

by Jon Turney
Science Correspondent

The Technical Change Centre's publication programme is falling behind schedule, and part of the problem appears to lie with one of its three main sponsors, the Science and Engineering Research Council.

The centre was set up in 1981 for an initial five years to study "the choice management and acceptability" of technical change.

Early last year it announced that 20 reports would be published in 1983. So far less than 10 have appeared.

Another five reports have been delivered to the SERC on work commissioned by the council but now has yet been approved for publication. Last year £220,000 of the centre's £290,000 budget came from the SERC, £90,000 from the Leverhulme Trust and the Economic and Social Research Council.

Some of the reports sent to the SERC are critical of the programmes scrutinized. A report on the council's specially promoted programmes - designed to speed up development in crucial areas of engineering research - warns of the problems created for research funding outside the areas selected for such promotion.

The TCC researchers proposed a different mix of technologies, concentrating on areas of special opportunity rather than weakness and changes in management to the programmes.

This report was delivered to the SERC in May last year, but has yet to be considered in detail by the council's engineering board. Instead, the board has just set up a special committee to examine the report.

Similar delays have occurred with reports to the council on materials engineering, computer-aided engineering and the integrated graduate development scheme for encouraging good graduates into industry.

The council describes the lag to administrative delay and affirms that the TCC will eventually be able to publish the reports. But the delay is frustrating for researchers at the centre, some of whom are anxious to speed up work on raising the centre's profile.

It is important for the centre to sharpen up its image this year to secure continuing backing from its sponsors. Among the three backers, officials of the SERC admitted privately last year that they were unhappy with the TCC's progress. The other two sponsors say it is too soon to judge its success.

Sir Bruce Williams, director of the TCC, said this week a number of new publications would accompany the next centre's second annual report, next month. These would include the reports sent to the SERC but that was to be expected. "Of course, we're impatient, but the delays are almost inevitable," he said.

Redundancy talks expected

by David Jobbins

Local authority employers and union officials hope to open negotiations soon on a new and comprehensive redundancy deal for college and polytechnic lecturers.

Both the Association of Metropolitan Authorities and leaders of the National Association of Teachers in Further and Higher Education are convinced that new arrangements are needed to replace the 1973-75 scheme drawn up in discussions through the Council of Local Education Authorities.

And in a separate move, the Association of County Councils is to press the Department of Education to extend the voluntary redundancy scheme for lecturers aged 40-49 beyond its present expiry date at the end of the 1985 academic year.

Talks on a new redundancy deal reached deadlock a year ago and neither side has shown much inclination for reopening the question. But local authorities, under growing

financial pressure from central government fear that redundancies in the near future are inevitable, and they want a scheme which is more appropriate for changed circumstances.

The 1973-75 agreements were designed to deal with redundancies arising from departmental closures brought about by changing patterns of student demand in specific subjects. Now both sides recognized that greater job losses as a result of the squeeze on public spending are almost certain.

Last year's breakdown came when the employers refused to meet union demands on the issue of one year's notice of redundancy. This was a recommendation in the 1973-75 agreement which has been regarded by Nafhe as binding on any employers. This issue is likely to figure strongly in new discussions.

In 1981 the national joint council, which negotiates conditions of service for college lecturers, resolved to negotiate a new comprehensive collective agreement on redundancy "as early as possible".

Despite the limited use authorities have made of the scheme for lecturers aged 40-49, which was announced by the Government in November 1982, the ACC is to tell DES officials that the 1985 expiry date is too soon. It feels that plans for any loss of staff, whether as a result of teacher education cuts or the National Advisory Body on public sector higher education, should take account of the fact that students are still on a course three years after admissions have ceased.

"An extension is both necessary and desirable," a senior ACC official said. Local authority leaders in east London have told Mr Gerry Fowler, director of North East London Polytechnic, they will be able to find about £750,000 towards an expected £2 million deficit next year.

"They have agreed to top us up to a lower level than in the present year, but generously granted their own financial situation," he said after talks with the leaders of Newham, Barking and Waltham Forest councils.

Phoney war is over, page 10

Centre fails in bid for Ford funding

Aberdeen University's internationally noted centre for defence studies has failed in its bid for "second round" funding from the Ford Foundation which until recently provided half its budget.

The American foundation gave the centre a lump sum for a five-year period, enabling it to employ up to three research staff annually. However, this money ran out on December 31.

"The money was academic venture capital, and we recognized there was never any presumption they would give us follow-up funding, but we always hoped," said the centre's director, Mr David Greenwood.

The Ford Foundation is about to announce the grant winners who will share its \$4m funding for security studies over the next five years. It understood the beneficiaries are those planning major innovation in their work.

"We think what we are doing now is worthwhile, and we would not trade a diminution of this against a trendy expansion," said Mr Greenwood. "But this leaves us with a problem. We will stagger on this session thanks to the university's continuing support, while actively seeking alternative outside money."

The university pays the salaries of Mr Greenwood, the deputy director, Dr Clive Archer, a secretary, and the department's overheads. But without funding for researchers, the range and scale of the centre's work will be curtailed, warned Mr Greenwood.

Academics in other institutions have praised the Aberdeen centre's work. "It's a credit to Scotland and has an excellent reputation in Europe and North America for its highly imaginative material," said Dr Gavin Kennedy, of Strathclyde University.

Ms Mary Cullor, of the Science Policy Research Unit at Sussex University, added: "I think the Aberdeen centre is very useful. There are very few places in this country which really put together reliable information on economics and defence."

Part-time study Early Orwell

Sir, - It is incautious to generalize about the suitability of part-time degree study for mature students on the basis of the survey at Birkbeck College (THESE, January 6). It is not true that "part-time degree study is only suitable for middle class students who have a job and have taken part already in further and higher education."

A third of Open University applicants are in working class occupations (manual, clerical, shop workers and so on). Many others come from working class backgrounds. Eleven per cent of students have no paper qualifications at all and a further 4 per cent have just one CSE pass or similar certificate. A significant minority of students are unemployed.

My dad was a London Transport bus conductor and I left school at 16 to be an office boy on a newspaper, making the editor's tea - or, in one case, Oxol! I became a journalist and would now be considered middle class, I suppose, though I don't think of myself as such. I was in my 30s with Oxol levels when I joined the Open University seven years ago. OU credits enabled me to transfer to a full-time B.Ed course at Middlesex Polytechnic in 1979. I graduated in 1982, completed my OU studies last year and now have two degrees.

No doubt one needs to be "highly motivated and self-disciplined" to take a part-time degree. (Sir Walter Perry once joked that the OU route was the most fiendish way to achieve a degree devised by man or woman.) But those qualities are not the prerogative of the bourgeoisie and it would be a tragedy if people were deterred from part-time degree study because they were not middle class, unemployed or lacked academic preparatory qualifications.

Yours sincerely,
LAURIE ANDREWS
33 Nursery Road,
Hoddeston, Herts.

Choice question

Sir, - The President of Corpus has had to take sick leave in the columns of THE TIMES from the Regius Professor of Greek for conniving at inverted snobbery and from Tessa Blackstone in your columns (THESE, November 18) for conniving at domineering idleness. He is of course repelled with spirit and denied any complicity in a political initiative that would no doubt have been unimaginable in a Greek polity. When he tells Tessa that the selection of students demands hard work, and that the Dover committee's proposals will demand even harder work, he is no doubt very right.

The call on resources made by this annual event, if only in don't labour, to any nothing of the 27 meetings of the

Early Orwell

Sir, - At a time when Orwell is much overhauled Richard Taylor's article on propaganda is timely. Orwell's early years were spent in the heyday of the Press barons, the rise of radio, and the ubiquity of hoardings. His manhood saw the vast successes of Nazi propaganda, but he never took full cognisance of its nemesis. By then he was overwhelmed by the dominance of Soviet ideology and its excesses. Thus he came to make the mistake of universalizing in 1984 a phenomenon that properly belongs to a closed society.

The fact is that world society has never been more open than it is at present with its cheap travel, declining illiteracy, long-armed broadcasting, and international economy. The very electronic devices that Orwell makes the means of surveillance are the same devices making for the diffusion of information and knowledge. Among much that is implausible in 1984 nothing is more so than the abrupt announcement in Hafe Week that Oceania is now at war with Eastasia and has never been at war with Eurasia - an announcement that renders all existing iconography instantly invalid.

We need to discriminate much more sensitively than Orwell does between open and closed societies, and Richard Taylor does well to remind us of the long-run connexion between effective propaganda and reality. Happily even the Soviet Union is reduced nowadays to expelling its dissidents in order to silence their voices in their homeland.

Yours sincerely,
KENNETH BURGIN
21, The Hawthorns,
Whitehall Road,
Worthington Green,
Essex



Orwell with his son Richard, Islington, winter 1945

Sir, - Professor Crick totally misunderstands Orwell's message if he thinks THESE, December 30, that by ordering to investigate alleged bias at the Polytechnic of London the Secretary of State for Education acted in the spirit of 1984. Whenever there is reason to suspect that totalitarian tendencies are gaining ground at a place of higher education an investigation is entirely justified. And, I have no doubts, Orwell would have agreed.

Yours faithfully,
L. SOLYMAR
Brasenose College,
Oxford.

Dover committee, must be great. If it is that added the labours and strategic computations; the coaching and the counselling within secondary schools, and to that were added the costs of presenting the selectees, the totals devoted to selection, over and above the national average, must be reckoned by the hundred thousand pounds a year. Not all of this is publically funded, nor is what is so funded a great part of the total provision. But in relation, say, to the costs of the new blood programme, or of restructuring, both of which have enormous implications for excellence over the next 40 years, the special selection costs are less insignificant.

These considerations concern only direct diversions of resources. They take no account of the influence upon the whole secondary, and by reflection, the whole tertiary, systems of education in this small country. What would be the educational effects direct and indirect, if entry to the ancient English universities were accorded the priorities accorded to entry to the ancient Scottish universities?

It would be rash, in the face of the whole European experience, to suggest that the effects would be small. The Dover committee, for all the time it spent, made small comment on the purposes of the priority given to this expenditure. It appears to have assumed that the products must be excellence, and fairness. No doubt the committee did not expect to produce complete satisfaction, and the correspondence generated, especially from head teachers, suggests that the Dover proposals will produce new problems. Nor perhaps was clarity expected.

Dr Robert Pitt, writing to THE TIMES (December 23) says of a baffled headmistress, that she is "only the latest in a line of distinguished heads whose letters to you show a total misapprehension of Oxford's new admissions policy". Not only heads will be interested to learn from Dr Pitt that schools will now have to prepare their pupils for "the modern world of verbal communication skills", it will be interesting to see what, in this particular country, will be the effect of this change on the objective of fairness.

The academic world should not doubt be more concerned with excellence. In this case, we are not attending a debate about the general association of excellence with high selection. For there is high selection before the application forms are filled in. There are two questions. First, whether present techniques of selection are competent to distinguish to top 2 1/2 per cent from among the top 5 per cent. The evidence that the techniques are competent appears to be largely anecdotal, and to ignore the fates of those not selected. There has for a long time been a little research evidence, recently mildly reinforced by minor studies at both ancient universities, that the competence of the techniques is limited, even slightly negative. Second, if the techniques do indeed produce positive results, what are the effects, either for the ancient universities or the nation, upon excellence?

Yours sincerely,
ROWLAND EUSTACE
Society for Research into Higher Education,
University of Surrey.



Chris de Moulton, of Swarthmore College, in the United States, holds forth during the fourth annual World Debating Competition held over six days at Edinburgh University. Mr David Steel, the university rector, judged a team from Sydney University to be the winners out of 40 entries from all over the English-speaking world.

Women lose out on 'new blood'

The "new blood" lectureships in universities are highly discriminatory towards women because they are restricted to exactly the age range in which most married professional women will be involved with young children, professor Daphne Jackson, president of the Women's Engineering Society said this week.

Those women who had their children earlier would be unlikely to have evidence of the necessary creative capacity to succeed in the competition for the new posts, she told a conference on women in technology. As a result, only 8 per cent of the lectureships had gone to women, and 4 per cent in engineering.

Professor Jackson suggested that the age range could be extended for women, or a few posts reserved for an older age group. "Better still, a proper scheme for women returners should be devised by Loughborough University with backing from the MSC."

Teacher training council plans criticized

by Patricia Santinelli

Doubts about the credibility of the Government's proposed Council for the Accreditation of Teacher Education and concern about the lack of financial resources to implement new criteria have already been expressed by two organizations.

Both the Polytechnic Council for the Education of Teachers and the National Association of Teachers in Further and Higher Education have told THE THESE that they are concerned about the implementation of the new criteria because no resources have been set aside to ensure that the actual programme of work can be carried out.

The Secretary of State for Education announced his intention of setting up CATE at the beginning of this month

in response to recommendations made this summer by the Advisory Committee for the Supply and Education of Teachers.

The council is to review all existing and new teacher training courses against new criteria, which require elements were originally laid down in the White Paper *Leading Quality*. To meet this criteria, it is proposed to extend Postgraduate Certificate of Education courses to 36 weeks.

The council is to be set up initially for a three to four year period and will begin work in April. Its membership is to be drawn from practising school teachers, teacher trainers and employers, all of which have been asked to nominate representatives as well as respond to the proposals by February 17. The council will rely heavily on

Heriot Watt pharmacy closure 'will affect health care'

Health care in south east Scotland will be "drastically reduced" if Heriot-Watt University's pharmacy department is axed, according to the chairmen of the area pharmaceutical committee for Edinburgh and the Lothians, and a Scottish executive member of the Pharmaceutical Society.

Mr Graeme Millar criticized the University Grants Committee for its recent proposal to axe the department

because it is too small. "Heriot-Watt, unlike universities in other parts of Britain, has always followed the official line in trying to control the numbers of qualifying pharmacists. Now they are suffering because they have cooperated."

The UGC was taking a national view, said Mr Millar, but pharmacy was very much a regional profession, and there were vacancies in Edinburgh and the Lothians, both in hospitals and the retail trade.

Mr Millar also warned that research would be badly hit with only two other schools of pharmacy in Scotland. It would be very difficult for people to commute to Glasgow, and impossible to travel to Aberdeen. "Although we have two large teaching hospitals they will not have the level of pharmacy teaching and research. We back the university wholeheartedly in its opposition to the closure."

Careers guidance inadequate, says HMI

Careers guidance in colleges of further education for young people aged 16-19 following non-advanced courses is inadequate and almost exclusively restricted to full-time, non-vocational students, say HM Inspectors.

This majority of colleges, according to a survey by the HMI of the practices in 30 colleges in urban, rural, and inner-city environments, still believe that it is their role only to provide students in four general areas of study already made an on school's decision of earlier careers advice.

The reality is that many students need help while at college in reviewing earlier decisions because of changes in their own ideas and development," says the HMI report.

College staff often feel that it is wrong to expose students to careers guidance. But this attitude was "inadequate," say the HMI's firstly because such students could find themselves being made redundant before completion of the course and secondly because not all students can be assumed to have made a reliable choice of career.

The latest survey builds upon the findings of the joint Department of Education and Science and local education authority report *Education for 16-19 year olds* which underlined the importance of guidance to match the diversity of course provision.

The inspectors found only three colleges had teachers working full-time equivalent 10 FTE students. Only staff at local authorities singled out a specific budget for careers work while the rest was provided at the expense of subject teaching.

Award Programmes in Education Management

Commencing in October 1984, the Anglian Regional Management Centre offers the following programmes.

Diploma in Management Studies (Education)

Teachers and administrators with managerial responsibility are invited to apply for this two-year day release programme located at Duncan House. Enquiries to: The Admission Tutor, Dr L. Watt, Anglian Regional Management Centre, Duncan House, High Street, Stratford, London E15 2JB. Tel: 01-590 7722, Ext. 3305.

MSc (Education Management)

Teachers and administrators with institutional management responsibility are invited to apply for this GNA two-year day release programme. Applicants for this post-experience programme should possess an honours degree and either a DBS or equivalent postgraduate qualification in Education Management. Location: Danbury Park. Enquiries to: The Admission Tutor: Mr N. Bennett, Anglian Regional Management Centre, Duncan House, High Street, Stratford, London E15 2JB. Tel: 01-590 7722, Ext. 3305 or 3306.

ARMC

NORTH EAST LONDON POLYTECHNIC
-ESSEX COUNTY COUNCIL



DON'S
DIARY

EPISODE 1

What is the Polish for "my toilet will not stop flushing"? ... Here I am 1,000 miles from home and the first time I need to know some Polish - I don't. Well I suppose I can fix the device if I shove the bits together - if I don't then I have the perfect incentive to learn some *hydraulic* words. It is late at night. I have arrived in Gdansk and tomorrow morning I am off to a conference in Poznan. This part of my trip was not planned - I hear about it from my boss in the taxi on the way from the airport. My boss says that we must leave very early in the morning as there may not be seats on the train. Very early means 6.30 ... "and don't bring your case, there will be no 'vacancy', a small 'bucket' will do ... it will be a short journey, about six hours".

Six hours doesn't seem too much after the flight from Warsaw. Our plane was a Russian twin-engine type with no seat allocation, four armed guards and mountains of sweets to ward off the effects of violent pressure fluctuations and an undulating flight path. Right up to take-off one of the guards stood with his back to the cockpit door, hand hovering over his holster. At the last minute he scuttled to his seat.

Now the only thing to work out is where my bed clothes are. There is a bed but no visible sheets or quilt. I call down the corridor after my hosts. ... Ah under the bed ... of course ... *dziękuję ... dziękuję ...* Good night!

EPISODE 2

Today it is a visit in the morning to the National Academy of Sciences solid state physics research laboratories outside Poznan.

The smooth system for dealing with visitors leaves us at the entrance of an imposing building. We are shown in and given a thick book, obviously in Polish, about the work of the institute. It is so obvious that I will be neither able to understand what is being said nor able to read the book that I put the book in my bag unopened and resort to overdrive for the hour-long lecture on crystal growth and other such things. It is like Sunday in the Kirk when the sermon seems a little obscure; I daydream.

After about an hour with my colleagues in the audience now showing a little fatigue it is after all 32 degrees Celsius outside and the room in the institute is airless. I begin to fiddle with my papers and in desperation begin to skim through the book in Polish about the institute that I have now removed from my bag. Even in an airless room it doesn't take long to see a certain resemblance in the text to familiar words "over the last two years".

I realize that not only is the book in English, and at last I have something to read, but the sequence of tables through the book seems rather familiar. The lecturer, now in his last lap, summarizes his talk in a familiar language with an OHP transparency that is Table 14 in my English book. As the bilingual lecturer finishes I put away in my bag my authorized version of the talk in English and wonder what my colleagues who have listened will think when they find no time to browse through the official booklet.

EPISODE 3

I have gone over my talk with my translator who wants to know not only the technical words "subsumes", "cognitive map", but wants to know if I am going to tell any stories. I rehearse them without much gusto. We begin. I say two sentences; she says two. I talk a little; she talks a little.

Imperceptibly the Polish translation begins to sound longer and longer for each of my blocks of

English there is a translation that sounds OK but is longer. Suddenly, at the end of a piece of translation, the audience laughs. "That's funny," I think, "I haven't told a story yet. Well, maybe a poor translation." I continue.

At the next break I have the feeling that some of my words don't quite match what the translator is saying. I tell my story about vampires and get no response after what I think should be the translation.

During one of the pauses, when in good translations one can catch not only one's breath but one's thoughts, I realise that I must now be following the translator. She is ahead of me; she is going to finish my talk before I get to the last page; I must do something. I fall to come to any conclusion before it is my turn again.

Suddenly the anxiety resolves itself - somehow we "leapfrog" back into sync and by the end of a 30-minute talk, expanded to about one hour of dialogue, we finish almost together. However, at the end, the response is so warm that I force the translator for stealing my jokes.

To cap it all I am invested into a student society, the "Quarks", and a very attractive girl from Cracow pins on lapel badge. The magic has returned.

EPISODE 4

Food is one of my weaknesses. Wherever I go some local food takes my fancy. This afternoon I had the best *bigos* I have tasted so far in Poland. The Irish have colcannon, the Germans *sauerkraut*, the Poles, *bigos*; it is cabbage with magic ingredients. After breakfast of sausage, Polish camembert, rye bread and undrinkable Russian tea in an unspectacular glass; lunch of sausage, soft Polish cheese and undrinkable Russian tea in an undrinkable glass. I find myself sitting down to an early tea of *bigos*.

I have returned from the conference in Poznan and am spending one of my free days seeing how the Poles escape into the beautiful Karshubian countryside to the south-west of Gdansk.

We discover the delightful *bigos* and the beer in a country cafe where we join farmers queuing up to fill enormous cans with beer. We can only guess that such quantities of beer are not for immediate consumption but for farm workers in the fields. Just before I had arrived in Poland a new set of regulations had been introduced to reduce the consumption of alcohol.

EPISODE 5

A brief walk around Warsaw this last evening before I leave for London in the morning. I decide to walk down to the Palace of Culture and then return via the Old Town. The Palace of Culture is the most striking skyscraper in Warsaw. It reminds one of Moscow University on which it was reliably informed it was modelled.

I look for some postcards on route and nowhere can I find the striking tower. I ask in a shop for some postcards - that is I point to some Others, and say very slowly. The lady in the shop says, in English: "We don't have any cards of that - why will you not send a card of something more interesting?"

I head back to the Old Town and taking a short cut through the station, I am struck by one last inconsistency in this country. At the entrance to the station are groups of elderly ladies with arms full of plastic carrier bags. They are selling them and it seems that business is good. Not any plastic carrier bags for sale but C & A, British Home Stores and John Lewis.

I recall earlier in the week seeing some well-known brand names on tins and jars in the litter; as we had walked in the Karshubian hills we had stooped to buy some eggs at a farm.

The old lady who took the money from my friend deposited it in a Marks and Spencer coffee tin. How on earth had it travelled to that farm? I got the answer I had come to expect. "Well, perhaps someone was here on an overseas visit and brought it with them." Good old British Council!

Ray McAleese

The author is director of the University of Aberdeen.

FEU plans adult expansion

by Felicity Jones

The Further Education Unit is to set up its own advisory committee on the education and training of adults.

The committee, to be chaired by Mr John Baillie, the principal of Southwark College, will begin by considering an initial policy document which has been drawn up by the board of management.

Arguments over the role of the committee have resulted in a compromise, whereby its official task will be to disseminate information on adult education. But in practice it is likely to examine all areas of the FEU's expanding interests in education.

Besides managing the Department of Education and Science's professional, industrial and commercial updating

(PICKUP) programme, the FEU will be overseeing curriculum development for the adult unemployed.

This programme will also be funded by the DES, although the FEU is opposed to the singling out of the adult unemployed for special treatment in this way.

At a recent DES and HM Inspectorate annual course on adult education, the findings of a FEU-sponsored study was used as a basis for discussion.

A two-year research project by the University of Surrey's department of educational studies - now in its final draft - looked at ways of developing a curriculum for adults through the adoption of a systems approach, beginning with the establishment of policies and principals, and continuing with

design, implementation and evaluation.

Although the FEU has hitherto concentrated on the non-advanced sector of further education it expresses a growing concern over the education of adults. In this area the unit criticizes the National Advisory Body's proposals for extending two-year degrees.

In reply to the NAB discussion paper on higher education in the late 1980s, the unit says that two-year degrees would inevitably lead to "second-class" status for students unless a more positive attitude was taken.

It refuses to endorse such a proposal unless extra resources and a greater initial investment are committed in advance of any large-scale move towards two year degrees.

Merger unions in talks call

by Olga Wojtas
Scottish Correspondent

Joint meetings have begun between Stirling University and Paisley College of Technology on the possibility of a merger, and it is thought a decision will be reached by Easter.

Paisley's principal, Mr Tom Howie, confirmed that there had been a small meeting of senior academics from both institutions just before Christmas, and that another meeting will take place this month. Working parties were set up in both institutions several months ago, but their deliberations have not been made public.

Mr Howie added that no time limit had been put on a decision but said: "We would like to reach a conclusion quickly. We don't want to go on and on discussing it."

But staff are becoming increasingly concerned that the campus unions have not yet been consulted. "A lot of people feel the whole thing is being handled with unnecessary discretion," said Mr Jack Dale, secretary of the Association of Lecturers in Scottish Central Institutions, and a staff member at Paisley. "We know the discussions are proceeding but we don't know what's being discussed."

Mr Ian Macfarlane of Stirling's Association of University Teachers said the union was pressing for the widest possible discussions. "Rumours and speculation are not a good basis for decisions about the future of institutions," he said.

Paisley and Stirling are officially discussing "increased collaboration" but this is generally accepted to be a euphemism for merger. "Collaboration's not what the game's about: it's merger or nothing," said one Stirling academic.

Neither ALSCI nor the AUT has rejected the possibility of merger, but Mr Dale said staff at Paisley were "concerned and envious". It was felt Stirling was seeking a merger because of fears about its own future.

"Engineers and scientists in Paisley feel they are in a strong political position which might be weakened by becoming part of a new institution. Other staff feel they might be threatened by rationalization," said Mr Dale.

Members of the Extemporaneous Dance Theatre go through the routines on show to students during the company's three-week residency at the South London dance school, the Laban Centre.

Scottish newsletter axed

Scottish academics have been shocked by a decision to axe a newsletter which publicizes their research achievements to foreign countries.

The Scottish Information Office has suffered a £30,000 cut as part of the Rayner efficiency exercise and as a result the *Newsletter from Scotland*, which is sent to the media and other organizations throughout the world, will be axed in March.

Mr Ray Footman, director of information services at Edinburgh University, said: "It will be greatly missed by the Scottish universities, and we would be delighted if there is any chance of the decision being reversed."

"Its strength was the independent judgment of a Scottish Office editor as to what constituted interesting news stories, rather than automatic reproduction of work being done."

"I think it is widely agreed it did

excellent work not only in relation to Scottish academic, scientific and industrial achievements, but in drawing Scottish universities to the attention of overseas students."

Mr Alan Forrester, information officer for Stirling University, said 800 copies of the newsletter were issued monthly. "We couldn't possibly write to 800 people a month, and arrange all the international newspapers and radio coverage."

Dr Norman Mackenzie of Robert Gordon's Institute of Technology in Aberdeen, said information officers could easily publicize work within the UK, but foreign promotion was a "minefield".

A Scottish Office official said: "The newsletter is only one part of our overseas unit. The rest of the overseas promotional work will continue and news will continue to be disseminated to overseas outlets."

Mr Dale.

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Mr Dale.

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DES calls for change of emphasis

by Paul Flather

Language lecturers should strive harder and help switch the emphasis of more courses from literary scholarship to more concern with oral skills and fluency, Mr Richard Bird, deputy secretary at the Department of Education and Science, urged last week.

Mr Bird, who is in charge of higher education at the DES, made a speech which clearly showed modern language teaching has become one of the department's central concerns.

Mr Bird was giving the opening speech of a national conference on oral

and aural skills in the modern languages degree, held at Bradford University last week and attended by representatives of Her Majesty's Inspectorate and about 100 lecturers from universities and polytechnics.

Mr Bird, emphasizing a personal view, also said he thought the clear dominance of French teaching in schools may not be such a major complaint as made out. He thought it might be better to offer more second foreign languages. If some schools dropped French, the transfer of pupils between schools would be disrupted,

he said.

His speech roused critical reactions from most of his audience, particularly his defence of the dominance of French teaching, although everyone welcomed DES support for better skills teaching.

But in a wide ranging speech, Mr Bird made clear there would be no more resources to help reforms or improvements in language teaching or to buy new equipment. Lecturers inevitably would have to work harder to achieve such aims.

"This is the note of asperity which I

guarding the needs of pupils and teachers in schools, dissuading significant numbers of the ablest school pupils from continuing, and "robbing universities of potential students who had switched to other subjects."

He noted how over the last 30 years, emphasis on literary studies in the language and literature degree had been accompanied by a deterioration in prose ability and a major decline in the French essay.

He blamed the decline in language uptake in schools on three factors: dissatisfaction with courses that fail to generate useful skills; a belief that languages have no vocational value and a stark choice for pupils between "unpalatable" languages and "more

useful" science courses.

The traditional model, he said, was against the national interest and he quoted four reports to back his case, including the 1974 British Overseas Trade Board Report linking linguistic isolation with declining international trade.

Professor Taylor, who is also chairman of the National Council of Modern Languages, listed four types of skills to be taught in language courses: receptive skills, productive skills, analytical skills and social skills.

He ended with a call for a sustained research programme to give the new curriculum and methods the kind of intellectual and academic "fire-proof" they needed.

Without offering a monolithic message, he said he had no doubt that part of the task of higher education language teaching must be to achieve a high level in oral communication.

He went on to warn that in future, language teachers may find more of their students outside their own departments. They would be doing more "service teaching" for engineers, scientists, historians and so on, he said, as the Government pursued its shift of emphasis to the sciences.

Professor Roger Tifford, director of the modern languages centre at Bradford University, said in a closing speech that there was no economic, political, or cultural justification for the current dominance of French.

He also said such changes were a question of policy and political will and not a question of financial provision.

Sir Keith 'caught out' over numbers

Mr Andrew Bennett, the Opposition spokesman on education, has accused Sir Keith Joseph, the Secretary of State for Education of acting like Ethelred the Unready over student numbers.

In a letter to Sir Keith and in a speech at Milton Keynes this week Mr Bennett said Britain was being sold short. It would be unprepared for the twenty first century unless more students were allowed to graduate.

Sir Keith had failed to take account of the likely demand for places in higher education in future, and had neglected to find out how many graduates British industry needed, Mr Bennett said.

"Not since Ethelred the Unready on anyone have allowed the real needs of a nation to be so obviously ignored," he said.

The University Grants Committee, the National Advisory Body and the Government quangos should not be asking universities, polytechnics and colleges of higher education how they would cope with falling student numbers.

Instead they should be looking for ways to improve the work of higher education institutions and making them more relevant to the needs of industry and modern society, Mr Bennett said.

A Labour Government would consider university spending an essential investment for economic growth.

Criticism of the relationship between the Government and the University Grants Committee has been levelled by Professor John Saville, chairman of the Campaign for Academic Freedom and Democracy.

The 1981 cuts had been both arbitrary and willful, and the UGC had carried out Sir Keith Joseph's aim of tightening the universities, he told the CAFE annual meeting.

"Today the universities were demoralized. They have been softened up and unless their mood changes dramatically they will accept all that is offered or taken away," he said.

The UGC was already suggesting departmental closures before the response to its 28 questions had been received. "The UGC must indeed be seen as the creature of Government."

The Committee of Vice Chancellors and Principals will never agree on basic fundamental issues, not least because some universities will continue to do well while their neighbours are drastically cut back, he pointed out.

The Association of University Teachers is too weak and its local groups vary widely in their effectiveness. Neither the Labour Party nor any other political group in opposition gives higher education any serious thought, Professor Saville added.



The Chinese ambassador to Britain and his wife, Madame Cheng (left), visited the University of Manchester Institute of Science and Technology last week to meet some of the 36 students from the People's Republic. The UMIST is on the point of signing a further agreement with the Central China Technological University (HUST).

Anger over merger name

Three London University colleges have agreed on the name they will share after they merge, despite deep-seated objections from students at one of them at least.

A recommendation from a joint policy committee that King's, Queen Elizabeth and Chelsea Colleges should be known as King's College after their merger has been endorsed by the three college councils.

At one stage the possibility of "Trinity" was floated but rejected because of the perceived need to preserve continuity after the merger by using an existing name. But in a referendum in which 30 per cent of QEC students voted, 75 per cent preferred Trinity to the proposal from the joint policy committee and were able to convince QEC's council the first time it considered the question. Later, however, QEC council reversed its position and ratified the recommendation.

Ms Titch Winter, QEC student union president, said: "We are alarmed at the total lack of consultation. We were told that if we did not give in on the name, QEC could lose its place in the merger."

In a letter to *The Times*, they called on ministers to intervene to prevent the Agricultural and Food Research Council cutting research at its only Welsh establishment.

Dairy research separates

by Jon Turney
Science Correspondent

The break-up of the Agricultural and Food Research Council's second-largest institute - the National Institute for Research in Dairying, near Reading - is planned under the council's new corporate plan.

The institute's 500 staff have been told it will be divided into two next year, one part to concentrate on food research and the other on animal nutrition. The NIRD's acting director Dr Clive Balseh said this week: "This institute will cease to exist as such from April 1, 1985."

Staff are concerned about the effect on the institute's £5.5m annual budget and about the possibility of work gradually shifting to other institutes.

According to the council's corporate plan, the new food programme at the NIRD will concentrate on a wider range of products than milk. The precise details will be worked out with the other two food research centres, the Food Research Institute in Norwich and the Meat Research Institute in Bristol. There will be more money overall for this programme, as part of the council's general expansion of food research.

However, the AFRC aims to save around £1m from integrating the animal nutrition studies at the NIRD with work at the nearby Grassland Research Institute at Shinfield. The corporate plan points to "the possibility of a progressive concentration of the work at the GRI site."

The new plans signal the end of an integrated programme of dairy research at the NIRD which has been a model for several establishments overseas since the institute was set up in 1920.

Dr Balseh said the NIRD had the best facilities in the world for work on dairy cattle and it was important to maintain these. He and the new director of the Grassland Research Institute would make detailed plans over the next six months on the best way to bring together their research on animal nutrition.

A separate proposal under the corporate plan to curtail the work of the Welsh Plant Breeding Station at Aberystwyth came under attack this week from Lord Cledwyn of Penrhos, former Labour secretary of state for Wales, and Lord Elwyn Jones, the former Lord Chancellor.

In a letter to *The Times*, they called on ministers to intervene to prevent the Agricultural and Food Research Council cutting research at its only Welsh establishment.

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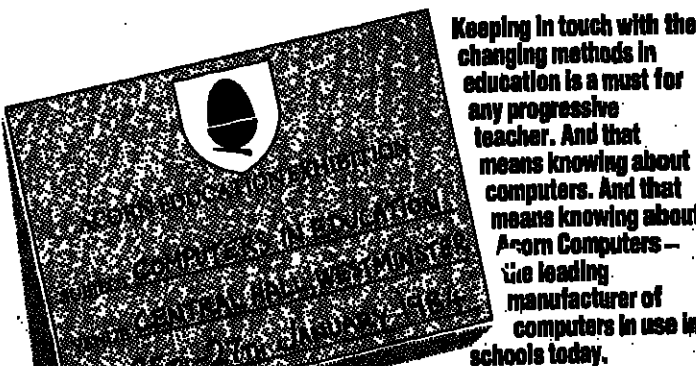
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Campus unions in united pay effort

by David Jobbins

University vice chancellors face a determined effort by campus trade unions to end low pay. Claims for substantial pay rises for 1984 submitted this week by unions representing non-teaching staff emphasize the issue and propose ways of dealing with it.

And university lecturers, who are not expected to submit their claim until later this month or early in January, are also likely to refer to lower paid academics and other university workers.

All the campus unions are to meet next week to plan a joint campaign strategy, and are likely to press for early negotiations and agreement in advance of April 1. For the first time, all groups of university workers aim to share the same settlement date.

Claims are far in excess of the 3 per cent assumed by the Government in the universities' recurrent grant for pay. Clinical academics, for example, will demand the full award to National Health Service doctors and dentists when the independent review body deliberates on the 17 per cent claim lodged by the British Medical Association.

In past years, ministers have found

the money needed to bridge the gap between the salary settlement for clinical academics and the award to NHS staff but have refused to release extra resources to allow other settlements.

Both technicians and white collar workers are demanding increases composed of percentage and flat rate rises designed to aid the lower paid; a "substantial" claim in the case of the Association of Scientific, Technical and Managerial Staffs, and 10 per cent from the National and Local Government Officers Association.

And manual workers are planning a full assault on low pay with a demand for a substantial flat rate rise as a step towards abolition of low pay and establishment of a basic rate equal to two-thirds of national average pay.

This is £99.47 according to NUPE's calculations, based on the national earnings survey updated to October. The lowest-paid manual workers receive under £68 a week, with those with highest skills and responsibilities receiving £83.65.

Clerical and secretarial staff salaries range from £3,094 to £8,714 with most earning between £4,000 and £6,000. Both NUPE and Nalga are seeking a reduction in the working week to 35 hours.

news in brief



3-D design

The three-dimensional designs and imaginative architectural programme of the 1920s Soviet architect Iakov Chervakoff have been brought together for the first time by Catherine Cooke, a lecturer in design in the Open University's technology faculty. The exhibition was devised at the invitation of Lionel March of the Royal College of Art where it had its first showing. It is now on at the Architectural Design Gallery in London until next month.

New chair

The University of York is to establish a new chair in public sector accountancy, funded jointly by Peat Marwick Mitchell & Co and the university. It will be located within the Department of Economics and Related Studies.

Paris speech

President Francois Mitterrand's speech on adult education as one of the keys to the future of both industrialized and developing countries is included in the proceedings of the last conference held in Paris of the International Council for Adult Education.

The 184-page document is available from ICAE, 29 Prince Arthur Avenue, Toronto, Ontario, Canada M5R 1B2.

Annual reports urge more reliance on private revenue

Universities are advocating a greater reliance on sources of revenue other than government grants in a bid to uphold academic standards in the face of an uncertain economic forecast.

A number of university annual reports released this month reflect efforts to expand and develop courses despite serious financial restraints over the past year.

The former vice chancellor of the University of Bath, Professor Paul Matthews said in his annual report that it was vital that funding arrangements continue to favour quality and to provide a firm basis for research.

Professor Matthews, who retired at the end of 1983, praised the efforts by industry in providing research back-up to supplement the university's funding allocation from the University Grants Committee and the Research Councils.

At the University of Durham, the vice chancellor, Mr Fred Holliday, warned that too many demands on the university's resources could be as damaging as overloading an electrical circuit.

The biggest challenge facing the university was to strive for innovation, Mr Holliday said. "But unless they bring money with them, new ventures can only be funded at the expense of existing activities."

At the University of Nottingham, the university council president Mr Roger Godfrey said that so far, the government's funding cuts had not impaired the university's growth. But he warned further cuts or increased burdens on existing resources would be "hard to bear".

Nottingham attracted almost £52m in research grants and contracts during 1983, for research and development for both government and private industry, but the university council was forced to release additional funds to enable even a modest amount of

development in the hardest-pressed sections of the university, Mr Godfrey said.

At the University of Sheffield, vice chancellor Professor Geoffrey Slims said that despite financial cuts, the university was still "on course" to meeting its budget requirements. However, this did not mean that the university should not look to other new sources for support.

Other universities claimed that an underlying problem affecting government grants was that the Department of Education and Science had based its allocations on the wrong figures.

It was the view of both the Committee of Vice Chancellors and Principals and the Royal Society that the department has "seriously underestimated" trends in student numbers, said the vice chancellor of the University of Essex, Dr A. E. Sloman, in his annual address.

Between 1984 and 1994, the number of 18-year-olds was predicted to fall by some 30 per cent and because of this, the department projected a sharp decline in the demand for places in higher education institutions, he said. Universities were now being asked to anticipate a substantial reduction in numbers.

However, Dr Sloman said this was unlikely to happen because a disproportionate number of applications came from the professional and managerial classes in which the number of 18-year-olds would actually rise until 1990. In addition, more women were entering universities.

Nevertheless, universities are encouraging a positive outlook in the search for alternative sources of revenue. In his address to the University of Kent, the vice chancellor, Dr David J. E. Ingram, proposed that appeals to the private sector should be seen as part of a more general need to promote university activities.

Open Tech head to move

Dr George Tolley has been appointed to head the new quality and development branch of the Manpower Services Commission and will take up the post at the end of the month.

It is only a year since he became the first director of the Open Tech unit overseeing the retraining and updating programme for technicians and supervisors. He was previously principal of Sheffield City polytechnic.

He explained the reason for his sudden move: "There is a considerable job to be done quickly in quality control. The success of the Youth Training Scheme is at stake, which is crucial to the future of a large proportion of the young people of this

country."

The MSC had advertised the post unsuccessfully before. Dr Tolley was persuaded to move across and take up the new position. He will be responsible for establishing the uniform standards of MSC programmes as a whole but will concentrate on the YTS at first, where there is a need to introduce quality control as a matter of urgency.

Dr Tolley said that he was moving out of the Open Tech programme with regret but had felt it now had an essential framework which was being put in place in quality control. Mr Stuart Dalziel (the present deputy director) will be acting director while the £22,000 year Open Tech post is advertised.

over the past 20 years and a full-scale review could both lead to some useful rationalization and also to a clearer sense of direction than we have at present.

My only fear about any such enquiry being established at the present time would be that it would be given terms of reference by this Government which would be negative and aimed more at contracting the resources available rather than seeking means of expanding them. It is difficult to have much record in the light of their palpable lack of personal commitment in many cases to state provision in the educational sphere.

It is a bit like Mrs Thatcher protesting that the National Health Service is safe in her hands while we are being prepared to commit her own personal health care to it. However, that lack of confidence must not be firmly enough faced to prevent an enquiry doing a useful job in pointing the way ahead for the next 20 years.

The previous Commons Select Committee did some useful work in a number of spheres but something more comprehensive and more substantial is, I believe, necessary if we are not to see ourselves falling behind in relation to other nations in the world as educational attainment obtains a higher and higher premium as time goes by.

Ian Wrigglesworth
The author is Social Democrat MP for Stockton South.

New trend is towards access courses

by Trina Francis

Many more adults who have not passed GCE O and A levels will be enrolled in degree courses by the end of the decade, if the new trend towards college "access" or "second chance" courses continues.

A huge increase in the demand for an alternative route into tertiary study for adults who lack the conventional entry requirements has prompted more than 40 colleges in northern England and the Midlands to set up special courses to bridge the educational gap.

Results of a survey on the subject, conducted by the School of Education at Lancaster University reveal that more and more adults are turning to access courses because levels do not meet their educational needs.

According to the survey, one access course - the Open College at Nelson & Colne College - has attracted 9,000 enrolments since it started in 1975. Of these, 200 students have been accepted for degree courses in higher education

institutions on completion of their Open College units. Others have used their skills in attaining employment or career advancement.

The survey's findings are published in a new booklet, *A Survey of Access Courses in the North and Midlands*. Co-editor, and coordinator of the Open College scheme, Mr Derek Crossland described public response to access courses as "encouraging".

Since the Open College accepted its first students eight years ago, Mr Crossland has been flooded with inquiries about the course, not only from higher education institutions within Britain, but also from Australia, America, Canada and parts of North Africa. A conference on access study held in 1979 attracted almost 200 subscribers - about five times the organizers had expected.

The Open College attributes the success of its programme to the determination by both tutors and students to work on improving study techniques. It says many students who enrol

for access study have never learned to write an essay, or how to use a textbook properly. Others may lack confidence because they will have doubts about their academic ability, Mr Crossland said.

"It should never be assumed that these adults know exactly what they want from higher education," he said. "Counselling is important. We also keep our tutorials down to small numbers and encourage students to communicate with their tutors."

About two-thirds of access students are employed in full-time or part-time work. Some may be out of work because of job redundancies and are undertaking access study to help them to a new career.

Generally, there are no entry requirements for access courses, but once accepted, students must complete a number of assignments and usually at least one three-hour examination at the end of a 12-month course. There are day and evening attendance patterns and most students attend two or three times a week.

Last year, the Open College introduced "distance learning" - a flexible programme for students who live too far away to attend classes regularly but do not want to undertake correspondence study.

Although some schemes involve a wide range of colleges and different institutions of higher education, many provide for only a limited range of subject areas, preparing adults for specific institutions and degree courses.

Mrs Susan Lucas of the School of Education at Lancaster University, said the survey - limited to the north and Midlands only because of financial restrictions - was meant to widen awareness of access schemes and also increase opportunities for adults to transfer between programmes with similar objectives.

A Survey of Access Courses in the North and Midlands, edited by Susan Lucas and Derek Crossland, available from the School of Education, University of Lancaster. Price: £1.00 per copy, including postage.

Survey will chart social attitudes

by Paul Flather

The first instalment of what should become an annual national British social attitudes survey - an important new resource for social scientists - is to be published this spring.

The survey will chart public views on topics such as education, health, economic policy, taxes, and political mores, and form the basis of an annual *Social Report* to be deposited for use in the Economic and Social Research Council Data Archive at Essex University.

A similar successful survey has been carried out for more than 10 years by the National Opinion Research Centre at the University of Chicago. Last year more than 150 separate articles were based on the NORC findings, which have shown interesting changes in public views on, for example, racial prejudice and sex roles.

Some £250,000 has already been pledged to ensure that the British *Social Report* comes out certainly for the next four years. The work is being done by Social and Community Planning Research based in London, directed by Professor Roger Jowell and Mr Colin Airey.

Professor Jowell said: "This is a very exciting project that we hope will become more and more useful to social scientists over time. It is amazing that while in the US it can be shown that attitudes to racial prejudice have changed in the past 20 years, here we cannot even tell if the Brixton riots have intensified or softened British attitudes to racism."

The SCPR plans to publish its findings in a series of individual reports to make for easy reference. These will include sections on political attitudes covering constitutional issues, views on efficiency and change; economic attitudes, covering salary and work-place views and labour markets; social policy and welfare, covering public expenditure, health, housing, education, social and moral values; plus summary and review sections.

Fieldwork for the 1984 survey was carried out in the spring of 1983 at 114 sampling points across the United Kingdom, producing 1,761 usable interviews, a 70 per cent response rate. Prior funding for this year's survey came from the World Foundation (£30,000), the ESRC (£20,000), the Monument Trust, one of the Sainsbury foundations, pledging £80,000 for each of the next three years. Marks and Spencer plc and Shell UK have also made contributions.

Backed by another £5,000 grant from the Nuffield Foundation, the survey will also produce other surveys, including a survey of attitudes towards the US, West Germany and Australia, to produce cross-national comparisons. By introducing similar questioning and sampling, Professor Jowell believes that *British Social Reports* will fill a significant gap in the knowledge of public opinion. "I am sure that once we can make comparisons and spot changes in attitudes from year to year, this will be a very important academic resource."

Poly student growth rate slows

Polytechnic student numbers have again reached record levels this year, but the rate of increase of new full-time students has come almost to a standstill.

Figures collected by the Committee of Directors of Polytechnics show that polytechnics were teaching 143,000 home students on full-time and sandwich courses at the end of October last year. That is a 5.7 per cent increase over October 1982.

But most of that increase is attribut-

able to the huge jumps in intake for 1981 and 1982. These students are now in their second and third years. The entry last autumn was 60,000 full-time and sandwich home students, a rise of only 0.5 per cent.

Entry to first degree courses has actually fallen overall by 0.6 per cent, although that disguises a 0.7 per cent rise in science and technology and a 1.4 per cent fall in other subjects. That disparity is even more noticeable in home student full-time and sandwich

enrolments to all years where they were up 7.4 per cent in science and technology courses and down by 3.4 per cent in other subjects.

The first degree entries show a sharp change of direction. Their decrease of 0.6 per cent in first-year entries last year contrasts with an increase of 7 per cent over all years and shows just how big the leaps were in previous years. But recruitment to other levels, including sub-degree work, has risen by 2.1 per cent.

Researching into business

Strathclyde University will shortly set up a research marketing company backed by the Scottish Development Agency. Strathclyde Technology Transfer, will be granted £90,000 by the agency, with additional university backing to give an initial three-year investment of £250,000.

The company will concentrate on marketing university research contracts and consultancies, after a report commissioned by the SDA showed promising prospects in this area. The university hopes to attract over £1m in research fees by the third year.

New staff will begin work around Easter, and the company will develop close ties with the new West of Scotland Science Park, opened last September by Strathclyde and Glasgow universities and the SDA.

Strathclyde Technology Transfer is the second new industrially-oriented venture at the university to be announced in the last few months. University officials are setting up a mediation details with artificial intelligence pioneer Professor Donald Michie, now at Edinburgh University. Professor Michie's new company, Machine Intelligence Research Affiliates, and the associated Turing Institute, will be based at Strathclyde from September this year.

Universities non-teaching staff unions are putting the finishing touches to their pay claims and will be submitting them jointly next week for implementation on April 1. Clerical and related staff are asking for 10 per cent to be distributed half as a flat rate sum and half as percentage.

If granted in full this would mean an increase of between £426 and £707 a year - not exactly a fortune but which might go some way to compensating clerical, library and related staffs for the increased work load and job losses suffered in universities in the last three years.

The low pay endured by these staff might have been compensated for in some way if there had been any improvements in conditions of service since national bargaining was introduced in 1974. But 10 years later they still work the same hours (36½), have the same basic holiday (four weeks), have no national pension scheme, and no long service leave.

The low paid do not expect the earth, just their fair share of it. Fair treatment from enlightened universities... now there's a thought to see in the New Year.

Rita Donaghy
The author is chair of the National and Local Government Officers Association's university committee and of the trade union side of the Universities' Council for Non-Teaching Staff.



Meek need their share of the earth

It's all right - I am not going to mention what year it is. I shall talk about low pay in universities instead. Some 70,000 non-teaching staff in universities are low paid and their plight is worsening both in relative and in real terms with a series of pay "rises" which have been well below the current rate of inflation.

They have also borne the brunt of increased workloads because of cuts in staffing levels and have been almost totally ignored as a group by the Government, employers and the press. Even the Equal Opportunities Commission in a survey two years ago on women in universities failed even to mention non-teaching staff (the majority of whom are women) and referred only to academic and academic-related employees.

In a meeting with Mr Peter Brooke, the Under-Secretary of State, last month the trade union side of the UCNS (Universities' Council for Non-Teaching Staffs) raised the issue of low pay in universities, the lack of career structure and the absence of a national pension scheme.

The dilemma imposed on university employees by a government which placed complete trust in the economy of the market-place meant the increases in inefficiency and the lowering of standards were not being publicized. This was in case such information had a counter-productive effect on individual institutions compared with "rival" providers.

Concern was also expressed to the minister about the effects of privatization on universities and job security. Pay levels and job security, had as they were at present, could only suffer if privatization were developed in universities.

The third area, which non-teaching staff were under attack on the low level of student grant. Apart from the moral arguments against deliberately keeping students at the lowest poverty levels, a falling grant would threaten the pay and jobs of non-teaching staffs as students could not afford to live in halls of residence (cleaned and administered by us) or to eat in university canteens.

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I would like to think that the decision taken by the House of Commons just before the Christmas recess to approve by one vote a proposal to bring television cameras into the chamber would soon be implemented. But I fear it is unlikely to lead to early action. I have been in the House long enough to know that non-binding decisions of this sort may nudge the issue ahead somewhat but very little happens with immediate effect in the very conservative procedures of the lower chamber.

When I first entered the House in 1974 I remember suggesting that it might be sensible to provide Members of Parliament with bleeps as there were two miles of corridors, hundreds of rooms and other places where members might be when others were searching for them. There was quite a lot of support for the idea but 10 years later only the messengers, who carry round little bits of paper with messages written on them, for members, have been provided with the beeps that doctors and others have had for many a year.

I recall, also, that members voted some years ago to link MP's pay with the assistant secretary grade in the Civil Service in order to avoid the unenviable debates that take place each year over how much members should be paid. After the last row it was agreed to phase in the current pay increase and although there was overwhelming support for "linking" I shall only believe it when I see it.

Similarly I shall only believe that television cameras are there when I see them. They would provide an eye-opener to the public and have a radical impact upon the way in which the House and its members operate and behave. I think the public have a right to see their own Parliament and its members by the most comprehensive and efficient means. But I also want to see the reforms that I think the introduction of television cameras would bring about as a result of the pressure that would be brought to bear by public opinion.

I find it profoundly depressing at times to hear the ad-hoc syllogical debates between the Labour and Conservative benches which one could write the script for - with sound effects - weeks before the debate took place.

PARTY LINE

They're playing the same old tune

of such rhetoric is totally irrelevant to the man in the street who would give short shrift to those responsible for it were it more on view.

I am not suggesting that there should not be or will not be sharp conflict both between parties and within parties about a whole range of issues. What I find appalling is the hackneyed, stylized pose of the party political music hall that have been wearing out the boards with the same old tunes, the same old jokes and the same old acts for too long.

This malady, however, has not afflicted the higher and further education sphere as badly as some others. What I sense here more is the feeling of drift and uncertainty rather than the loud beating of party political drums.

The most staggering figure to me is the Department of Education and Science prediction that the number of school-leavers with at least two A levels will fall from the peak of 122,000 next summer to 108,000 in 1990/91 and possibly to only 94,000 in 1995/96. The DES forecast of future demand for university places has been challenged by the Association of University Teachers among

others and we all know the difficulties of forecasting such figures.

It would have been difficult to foresee the increase in demand for further and higher educational places from the equally unpredictable large rise in unemployment over the last few years. But we have learnt a lot about these matters since the Robbins report and a thorough examination and comparison with other countries, as well as some determination of what our own needs and hopes should be, would seem to me overdue.

When one adds to that the unsatisfactory relationship between sixth form colleges, further education colleges, colleges of education, polytechnics, universities and the whole plethora of activities that has grown under the aegis of the Manpower Services Commission one begins to see the need for a hard look at what resources we have got, what objectives we are seeking to achieve with them and whether we are doing it in the best possible way.

Has the time not come for another substantial enquiry into the country's further and higher education and training facilities? They have changed considerably

over the past 20 years and a full-scale review could both lead to some useful rationalization and also to a clearer sense of direction than we have at present.

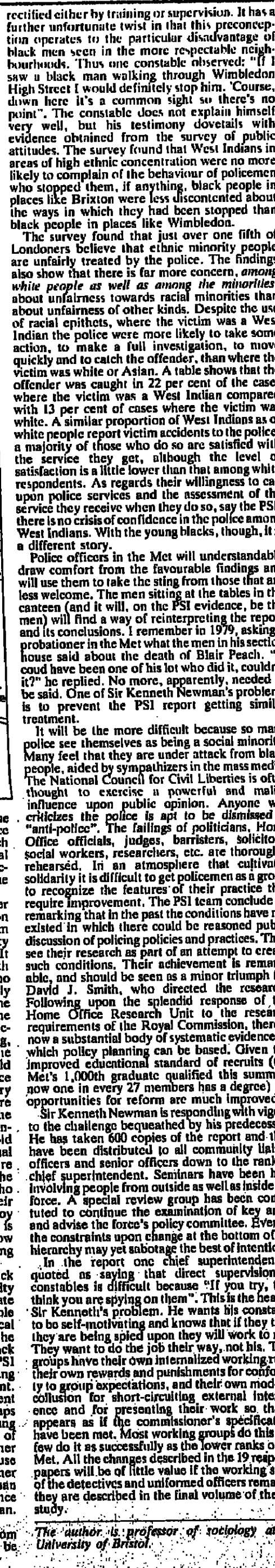
My only fear about any such enquiry being established at the present time would be that it would be given terms of reference by this Government which would be negative and aimed more at contracting the resources available rather than seeking means of expanding them. It is difficult to have much record in the light of their palpable lack of personal commitment in many cases to state provision in the educational sphere.

It is a bit like Mrs Thatcher protesting that the National Health Service is safe in her hands while we are being prepared to commit her own personal health care to it.

However, that lack of confidence must not be firmly enough faced to prevent an enquiry doing a useful job in pointing the way ahead for the next 20 years.

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Ian Wrigglesworth
The author is Social Democrat MP for Stockton South.



BOOKS

Reconciling equality and liberty

by Ronald Beiner

Spheres of Justice: a defence of pluralism and equality
by Michael Walzer
Martin Robertson, £15.00
ISBN 0 85520 683 7

John Rawls is generally acknowledged as having launched the contemporary regeneration of liberalism as a philosophy of society through a thoroughgoing reflection on first principles. He did this by placing the question of distributive justice in the centre of liberal philosophy. A whole succession of writers has followed in his train, the most recent of whom is Michael Walzer with his important new book, *Spheres of Justice*.

Walzer writes with enviable lucidity and wit as well as a marvellous command of historical and sociological detail. He understands what is involved in the life of a community in a way that a good many social scientists fail to do (or of which they are incapable). Among my favourite vignettes are the discussion of the way we have substituted the cure of bodies for the cure of souls, and thereby traded longevity for eternity; and the brilliant contrast between (public) holidays and (private) vacations. The book is brimming with ideas, and should be read by everyone seriously concerned with social theory as a guide to contemporary social policy.

Walzer seeks a solution to the old problem of how to promote both equality and liberty (that is, without advancing one at the expense of the other). He thinks he has found a solution to the problem in what he calls "pluralism". This, according to one formulation, is the principle that "social meanings call for the autonomy, or the relative autonomy, of distributive spheres". Thus, for example, the sphere of security and welfare is autonomously governed by the distributive principle of need, the sphere of reward and punishment is autonomously governed by the distributive principle of desert, and so on. (This recalls Plato's conception, according to which justice is "minding one's own business" where each social function is isolated from the rest; and none violates the jurisdiction of another.)

The idea here is a stunningly simple one: "It is that no person should be dominant in one sphere of the human good (say, wealth or opportunity) simply because he or she is foremost in another sphere (say, political power or intelligence). Each social good prescribes its own norms of distributive justice, and the society where these various norms do not encroach upon or trespass into other domains will be a just society. Walzer himself credits Ronald Dworkin with having inspired his conception of "complex equality", or the principle that we should respect the autonomy of the different spheres of justice.

Substantively, what Walzer is after is a society free of domination which is committed to broadly egalitarian social distribution — is pretty similar to what Rawls is after philosophically, however, they proceed in quite opposite directions. Rawls wishes to abstract as much as possible from the particular forms of social life (taunted by familiarity in pursuit of a universalist standpoint, whereas Walzer's standpoint is, ironically, particularist). Walzer, in contrast, stands in the cave. Walzer has no desire to depart from the particular and the familiar; rather, his ambition is to make clear those social practices and ways of arranging our shared collective life to which we are already committed.

To my mind, both procedures are theoretically defective. Walzer takes up his standpoint too close to the standards and perspectives of a given society. Rawls takes up his too far away. In the latter case, philosophy threatens to turn into abstract economics (with its rational choice model-building). In the former, it threatens to turn into descriptive sociology. In both cases, political philosophy is in danger of losing its proper location and its autonomy. (Ronald Dworkin has recently challenged Walzer's attempt to recast political philosophy more towards the empirical, the concrete, and the historical, concluding: "We

cannot leave justice to convention and anecdote.")

Walzer also reverses Rawls's procedure by shifting the centre of theoretical attention from a theory of rights to a theory of goods (comprising not only material goods, such as wealth, security, office, power, but also cultural and spiritual goods, such as membership in a community, leisure, education, love, kinship, and self-esteem). Rawls offers a theory of goods, but it plays a secondary role within his theory of justice, and indeed his theory is for all intents and purposes complete before he even embarks on his discussion of goods. For Walzer, by contrast, the theory of distributive justice is wholly based upon an account of the goods being distributed. Accordingly, the whole of his book is occupied with the theory of goods (though not with a theory of the good: justice, says Walzer, is not controlled by the idea of the good as a singular conception). In explicit counterpoint to Rawls, Walzer emphasizes that he will make no use of the idea of rights in formulating his theory of justice. He thus opposes his own "pluralist conception of goods" to Rawls's "universalist conception of persons".

For Walzer, a theory of distributive justice coincides with a theory of goods, for where there is distribution, there are goods to be distributed (implying that we must be apprised of the nature of those goods), and, conversely, where there are goods, there is the need for distributive principles. The question of distributive justice

presupposes the question "what are we distributing?" (that is, what do we take to be the range of social goods), and this in turn presupposes the deeper theoretical question, "according to what shared meanings and communal understandings do we take these to be goods?" (that is, goods worth distributing). For instance, we decide how much affection and respect is due to husbands and wives, relative to a given society. "What are husbands for?" Walzer thereby gives to the theory of distributive justice an unprecedented scope.

Walzer seems to derive the norms of political life from what Oakeshott called "the pursuit of intimations". Competing policies (regarding reverse discrimination, for instance) are embraced or rejected according to whether they are in line with, or inconsistent with, our historical traditions and best of our institutionalized practices. Walzer wishes to inquire into what citizens owe one another given the community they actually inhabit. Social policy should proceed in accordance with commitments already entered into. The community should "live up to the logic of its own institutions". It becomes the task of the philosopher to enjoin us to follow through the implicit logic of our own social attitudes as these have developed in history (say, our attitudes to medical care in the history of medical practice).

Let us consider one of Walzer's examples. He rejects the claim of American advocates of restricted im-

migration (around 1920) on the grounds that they were mistaken in thinking that they were defending a homogeneous white and Protestant country: "Earlier Americans, seeking the benefits of economic and geographic expansion, had created a pluralist society; and the moral realities of that society ought to have guided the legislators of the 1920s." But what if the earlier Americans had in fact created a club of WASPs? Would it then have been legitimate to exclude non-WASPs from membership in the state? Walzer introduces various qualifications, but his answer seems to be that in questions of membership, community as a social good normally takes precedence over other considerations (which means that the community retains the prerogative to define its own identity, however restrictively). A less historicist answer might be that a multiracial society is an inherent good, even if members of a given community have not seen fit to incorporate it in their collective vision of themselves.

It is true that we take our bearings by shared goods. But is sharing, by itself, enough to make our shared goods, and shared conceptions of the good, ultimately desirable? It is easy to imagine shared understandings for which it would be impossible to produce any rational justification as soon as one stepped outside of that particular social world. Walzer comes perilously close to robbing us of the independent standpoint from which we could draw back and critically judge cultures,

assuming that they have satisfied the criterion of internal coherence — for social criticism, according to Walzer's conception, is always a form of immanent critique. The provision of such an independent standpoint has always been the function of political philosophy: to probe whether shared beliefs and conventions are in fact rationally justifiable, irrespective of the fact that they appear compelling within the cave. Walzer fears that this would impose a coerced unity upon the wonderful plurality of goods that are actually cherished and sought after in society.

At the beginning of his book, Walzer proclaims that his theory of justice "proceeds without foundational commitments" (such as Aristotelianism or utilitarianism). But if the foundations are not provided by philosophical inquiry, can they really be left to the contingencies of cultural self-understandings as these evolve through history? Walzer is right to put the emphasis that he does upon the theory of goods, for it is true that we cannot sensibly determine just distributions if we do not know what we are distributing. It is more questionable, though, whether Walzer can bring his theory to fruition without confronting the basic question of political philosophy: are individuals and communities in history the supreme arbiters of what is good?

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WORLD'S HIGHEST STANDARD OF LIVING

There's no way like the American Way

Blacks queuing for flood relief in Louisville, Kentucky in 1937. The picture, taken by Margaret Bourke-White for *Life* magazine, is reproduced in Marshall Walker's book, *The Literature of the United States of America* (Macmillan, £14.00 and £3.95).

Ideal relations

The Vindication of Absolute Idealism
by Timothy Sprigge
Edinburgh University Press, £17.50
ISBN 0 85224 455 X

"Vindication" in a modern title not only implies the justification and exoneration of something on trial, it also suggests us to be surprised at the outcome. Timothy Sprigge is aware of how far this, his most important and original work, is from the mainstream. As he reminds us, absolute idealism is an option under-represented in current literature which, in view of the ill-fatedness of many of its supporters in quite recent history, must have been based upon something stronger than one would gather from the usual light dismissal today. Sprigge's spiritual home is in Anglo-American philosophy of the late nineteenth and early twentieth centu-

ries, in particular in dialogue with the great figures of Harvard philosophy (Royce, James and Santayana) and their contemporaries the British Idealists. For some years he has promised a comparative work on Bradley and James, and despite its incongruous title as a commentary on James, this is essentially what we have here. It is an ambitious undertaking updating important nineteenth-century themes to deal with challenges from phenomenology, natural language, and physicalism. As such there are several paths opened but self-consciously not explored. But the argument overall has the sweep and confidence of a Royce or a Bradley which makes it (and then) attractive reading in these less imaginative and more technical times.

The Jamesian plank of the argument rests upon consciousness as sentient (self-knowing) experience. Following the Harvard philosophers' doctrine of the "specious present" (James's stream of consciousness), consciousness is established as a continuum, and a special sort of concrete universal. This leads through a Bradleyan discussion of judgement to the first main

conclusion: the vindicating of panpsychism. In a summary discussion of seven types of theory about reality, Sprigge finds behind each phenomenal thing an inescapable foundational reality; there are no physical things which cannot be regarded as consciousnesses or concrete universals.

The main Bradleyan plank ties panpsychism to the theory of internal relations. It is only thus that Sprigge is able to understand the interaction of the distinct "pulses of experience". Relations for him are not merely ideal, but following a neatly argued "thesis of required togetherness", holistic. They are, in fact, further examples of universals.

From both types of argument Sprigge derives his case for the Absolute. James would not follow him here, and he does declare himself content with those readers only persuaded as far as the panpsychist bridgehead. This is at first sight disturbing, but it does reflect what Sprigge outlines as a characteristically "method and goal of metaphysics". This compels the philosopher to strive for not only very general, but also "deeply literal" truths about the universe. He must, to use a distinction on

which the argument hangs at critical points, build his beliefs towards the intuitively "fulfillable", replacing progressively his "pragmatic fictions and devices".

Occasionally this distinction is problematic, as for example when we are told that the alternative to a holistic view of relations is for us to "throw up our hands in despair". Advocates of a Peircean rather than a Jamesian pragmatism, with greater confidence in the ultimate coherence of experience, would find Sprigge's procedure here distinctly pragmatic. But such reservations do not damage the conclusion that Professor Sprigge has effectively and eloquently revived a noble tradition of speculative metaphysics from a non-dogmatic base. Although this book carefully eschews religious and ethical implications, the groundwork (for example on theodicy or animal rights) is here, and it will be interesting to see how he follows his distinguished predecessors into such areas.

David Watson

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BOOKS
Images of a society

Society and Literature in England 1700-1760
by W. A. Speck
Gill & Macmillan, £20.00
ISBN 0 391 02945 2

Professor Speck is one of those history men whose eyes are forever tempted by the lush imaginative pastures that lie on his literary colleagues' side of the fence. His book sets out to cross boundaries.

There is nothing very new in this. As Speck observes in the introduction to this book, "literary works have traditionally been used as prime source material for the history of English society". This is particularly true of the "Augustan" age when the direct involvement by so many major authors in political propaganda makes their works required reading for any historian of the period. Yet although modern historians of such different kinds as Basil Williams and Roy Porter have delectably rummaged novels and plays to deck out their social histories of England in the eighteenth century, there are, as Speck acknowledges, real dangers in this practice. "Imaginative" literature is often exaggerated, frequently imprecise and notoriously resistant to historical categorization, and modern historians have increasingly tended to prefer statistical evidence to the anecdotes and images. And so Professor Speck has embarked upon a new and enterprising study, that of eighteenth-century society itself, but rather of the contrasting images of that society presented in its literature.

This is a work not of sociology but of iconography, a study of fictions rather than facts. Speck presents us with the various descriptions of such a typical figure as the Tory squire as drawn by Addison, Vanbrugh, Fielding or Gay respectively not in order to tell us what such squires were really like, but to draw attention to the elements of caricature in these descriptions which indicate their Whig or Tory, court or country sympathies. This is an interesting and praiseworthy approach and the book should be of real value to students of both the literature and the history of the period. It avoids the false omniscience of some "background" books and offers useful insights into the antithetical models and dialectical arguments that are so characteristic of Augustan works. Professor Speck walks his middle path between the disciplines with tact and care, indicating the extent to which we may, both as historians and literary critics, be the dupes of the stereotypes and stereotypes of the period.

In both length and intellectual ambitions this is a modest book and, inevitably, there will be specialists in the history and literature of the period who will find points to quibble over in Speck's remarks. His analyses of the passages he cites are brief and his summary. His intention appears to be to offer the widest possible range of texts, while keeping his commentary and argument to a minimum. Often he confines his role to that of referee, intervening between the views of E. P. Thompson and Peter Laslett, for example, or between the polemics of Whig and Tory pamphleteers. Apart from the country gentleman, the book studies the role and reputation of the professions, attitudes to marriage and to London, and the influence of the worlds presented in the works of Fielding and Smollett.

As a literature man myself, it's predictable that my own reservations about the book concern the use of literary texts, which may often be rich in classical allusions and metaphorical connotations, as works with a single historical meaning. Thus Speck cites Pope's "Man of Ross" as an example of

the literary presentation of a landowner as a patriarch rather than a patriarch. But he says nothing of the Christian and Horatian elements which these weaves so cunningly into this idealized portrait. Elsewhere there is a tendency to smooth out the ambiguities in ironic texts and to offer readings which represent a consensus view rather than an individual interpretation. However, it's only fair to acknowledge that Professor Speck is well aware of the dangers and limitations of his chosen approach and offers his work with a disarming lack of pretension.

Altogether this is a useful and interesting book, happily free from jargon, which assembles a wide range of literary works in order to create not a portrait of the age, but an illustrated catalogue for those browsing among the portrait galleries of others.

David Nokes

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Complex philosophy

Andrey Bely: a critical study of the novels
by J. D. Elsworth
Cambridge University Press, £19.50
ISBN 0 521 24724 1

Poet, novelist and short-story writer, prolific literary theorist and memoirist, Andrey Bely is one of the most significant figures of Russian symbolism. His novel *Petersburg* has claims to be the movement's greatest achievement. Yet to English readers he remains almost entirely unknown.

At last, as this year's fiftieth anniversary of his death approaches, English publishers have stirred. Bely begins with the excellent Harvester Press translation of *Petersburg* as a "Penguin Modern Classic". Bely scholars are greatly in the debt of Cambridge University Press, who with Ada Steinberg's fascinating *Word and Music in the Novels of Andrey Bely*, published last year, and Dr Elsworth's new book have contributed significantly to serious study of his achievement in prose.

The difficulties the reader encounters in understanding Bely's prose are caused in large measure by his use of the novel form for the articulation of a complex personal philosophy and for daring experiment with language. These difficulties are compounded when Bely's espousal of anthroposophy begins to be reflected in his fiction last year, and Dr Elsworth's new book has chosen to precede his analysis of the individual novels with two chapters of elaboration of Bely's theories. The first of these, "Bely's theory of Symbolism", is formidably complex, but

Dr Elsworth leads us carefully through the influence of Schopenhauer, Kant, neo-Kantian epistemology, occultism, theosophy, Vladimir Solov'ev, Nietzsche and Maxim Gorky, as reflected in Bely's extremely large output of essays in periodicals, revealing a consistent vision of the world as duality and the recurrent motif of the transformation of the self. He also shows Bely evolving a theory of language that was not only to be rooted increasingly overtly in his own novels, but would also be studied attentively by later scholars, including the Russian Formalists. The second chapter, "Bely and Anthroposophy", shows how Bely's meeting with Rudolf Steiner gave him a framework into which all his intellectual and spiritual concerns could be placed.

Bely's first three novels, *The Silver Dove*, *Petersburg* and *Kotik Letayev*, have already been widely studied and have been translated into English. In his revealing chapters on these works, Dr Elsworth traces a major evolution in Bely's novelistic concerns and practice between 1909 and 1917. The theme of the crisis of culture, present in *The Silver Dove* in the figure of the hero, Dar'yalsky, reaches its fullest expression in *Petersburg*. In *Kotik Letayev*, Bely turns his attention entirely to internal experience, as the eponymous child hero explores language and re-makes the world.

As Bely's philosophical position became more and more esoteric, so his novels became less and less accessible. On the four last novels, Dr Elsworth's major contribution is the elucidation of their aesthetic and philosophical motivation. He writes particularly well on the *Enigmas of the Russian*, the further experiences of Kotik Letayev, showing Bely's gradual move into rhythmic prose, but admitting it to be the most esoteric of all the novels. *Notes of an Eccentric*, which relates his hero's return to Russia from the anthroposophical colony at Dornach, is admitted to be "in most respects . . . a failure", but a failure which led us



Kafka's three sisters, a photograph from Jiffi Gruša's book *Franz Kafka of Prague* (Secker & Warburg, £5.95).

author to return to plot in his last two novels, *Moscow* and *Masks*. Readers who have thus far found *Masks* intractable will be stimulated by Dr Elsworth's analysis, which concludes by finding in it "a zenith of achievement".

This is not an easy book. Necessarily tentative and partial, it is, however, a continually lucid guide, revealing particularly in its incorporation of material from the theoretical and autobiographical prose Bely was writing

simultaneously with the novels. Certain of its key concerns — sound, language, colour — are approached from a different perspective by Dr Steinberg in the book mentioned above, so that the two studies become, as it were, companion volumes.

Julian Graffy

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Creating a mood

Chekhov: a study of the four major plays
by Richard Peace
Yale University Press, £12.00
ISBN 0 300 02961 6

Despite their sometimes inconsequential appearance the texts of Chekhov's plays have extraordinary depth. In this new study the essays, each on a different play, are devoted to close analysis of the allusive aspects of the Chekhov text.

Professor Peace writes perceptively about the function of ritual and about complex systems of internal reference, and extends our awareness of the role of symbolism and literary allusion. He regards all of these devices as responsible for the "mood" of Chekhov's plays. Signals given by the texts, in both dialogue and stage directions, are identified and their resonances in the remainder of the play singled out and assessed.

A key motive for this approach lies in what Professor Peace calls the "psychological deafness" of the characters in their relations with one another. The internal mechanisms of the text, in his view, supply the

audience with the necessary emotional information often lacking at the level of naturalistic dialogue. In this way Chekhov reconciles the demands of the life-emulating naturalistic theatre with the playwright's need to synthesize and present his material within the artificial medium of drama. As Professor Peace puts it:

the very fact that the examples used to illustrate the argument . . . recur as images which have obvious symbolic content . . . suggests that Chekhov's dramatic techniques strive to create order and sense out of the very lack of meaning put forward as that of life itself.

A striking example, analysed by Professor Peace, which reconciles the requirements of naturalism and theatricality, is Chekhov's use of domestic ritual. The assembling of characters for the ceremonies of tea-drinking, meal-taking, card-playing, or merry-making was not regarded previously as of great dramatic potential. Chekhov's technique lies in making minute alterations to the ritual, which signify fundamental changes in the relationship between characters, and in their views of themselves: behind "the ritual of hospitable communion", he says, "lurk passions and frustrations." Professor Peace also shows how internal reference and recurrent symbolism provide dramatic cohesion and unity. An example is his refreshing discussion of music and musical reference, and of the symbol of Moscow in *The Three Sisters*.

One value of this study lies in the extensive analyses of the literary allusion, hitherto recognized and named, but rarely pursued with such vigour. Clarifying literary reference in the text gives scope, here nicely capitalized upon, for viewing Chekhov in the context of Russian literature, (though not the Russian theatre unfortunately). However, Professor Peace does add significantly to one topic: the importance of *Hamlet*. He argues that the theme of usurpation deriving from *Hamlet* is seminal not just to *The Seagull* and *The Cherry Orchard* but to Chekhov's drama as a whole. In *The Seagull* there is the theme of the usurpation of reality by art; of man and nature by science in *Uncle Vanya*; and of one social group by another in *The Three Sisters* and *The Cherry Orchard*.

If I have a quibble it is that there is no apparent pattern to the treatment of the four plays, and within each essay little indication is given of the subjects which will emerge in the discussion. However, this lack of structure may be dictated by the elusive nature of the material. Indeed this may be the reason why these aspects of Chekhov's text have not been successfully treated in depth before, and why they are frequently lost in production.

Cynthia Marsh

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Magical rule

The Mercurian Monarchy: magical politics from Spenser to Pope
by Douglas Brooks-Davies
Manchester University Press, £25.00
ISBN 0 7190 0954 5

The currency of hermetic ideas in Renaissance England has been the subject of much critical debate. That mystical neoplatonism acquired a certain fashionable appeal towards the end of the sixteenth century is undeniable. Chapman, for example, adopts the pose of platonic mystagogue in addressing his early poem *The Shadow of Night*, not to "those searching spirits, whom learning hath made noble and nobility sacred". But Chapman was something of an isolated figure and scholars have treated with some caution Francis Yates's claim that there was in Elizabethan England a group of neoplatonist magicians and their friends pursuing "deep" philosophical studies.

Douglas Brooks-Davies now returns to the question of the influence of neoplatonism in an erudite and teasing study of literary representations of the

Elizabethan and Stuart monarchies. His theme is the magician king, and the figure who symbolizes this mystical ideal of sovereignty is Mercury (or Hermes). As an intermediary between gods and men Mercury is an appropriate symbol, Dr Brooks-Davies argues, for the monarch with his "two bodies" — the one mystical and immortal, the other fallible and mortal. By means of magical arts the mercurian monarch is able to master the secrets of nature and thus restore order and harmony to a fallen world.

The boundaries of the study are represented by the two modal goddesses — Gloriana (from *The Faerie Queene*) and Belinda (from *The Rape of the Lock*), types respectively of the Tudors and last of the Stuarts. Other chapters deal with the court masque; Milton's early poetry; and *druidism* in *Drayton*, *Lovelace* and *Marvell*. But it is Spenser who, as inventor of the myth of the mercurian monarch, receives closest attention. Just under half the book is devoted to *The Faerie Queene*.

As a neo-medieval romance which draws on the *mythos* of Arthurian legend, *The Faerie Queene* is rich in magical imagery. Acmagico, Acrasia, Busirane and all enchanters who employ demonic arts to corrupt virtue. However, Dr Brooks-Davies argues that Spenser's preoccupation with magic may be seen not simply in these evil characters, but

in the overall scheme of the poem — a scheme which is epitomized in the union of Redcrosse and Una at the end of Book I, signifying that "religion and country have been united in an image of Protestant imperialism that is essentially magical".

In the absence of demonstrable intellectual debate the bulk of the evidence for the essentially magical nature of Spenser's political theme must inevitably be internal and speculative. Mercury himself does not actually appear in the six completed books of *The Faerie Queene* and his relevance to the poem's depiction of monarchy is, as Dr Brooks-Davies admits, "not strikingly obvious". It depends rather on identifying allusions, some explicit, others covert.

The most obvious mercurian allusions are the Palmer's staff which Spenser tells us is made of the same wood as Mercury's caduceus, and Cambrina's "rod of peace", with its entangled serpents. Again, "it is not immediately apparent that these two rods have monarchical implications". However, read in the context of Spenser's interest in magical theology, it is clear that, not only these two images, but also Gloriana's sceptre and Una's rod "must all be viewed . . . as aspects of an archetype which assimilates serpent rod and monarchical sceptre".

This "master symbol" reappears in Milton's *Lydeia* where, the

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BOOKS

The lessons of Munich

Neville Chamberlain and Appeasement: a study in the politics of history by Larry William Fuchser Norton, £18.95 ISBN 0 393 01607 2 The Fascist Challenge and the Policy of Appeasement edited by Wolfgang J. Mommsen and Lothar Kettner Allen & Unwin, £18.50 ISBN 0 04 940068 1 1939: a retrospective forty years later edited by Roy Douglas Macmillan, £17.50 ISBN 0 333 33632 1

Images of appeasement were once straightforward and simple. The directors of the British foreign policy were craven, ignorant and vain, with little intelligent grasp either of power politics or the dynamics of Nazism. Their invincible and facile determination to maintain peace, seemingly at all costs, led in the end to the disaster they sought to avoid. It was easy to dismiss Neville Chamberlain as an incorrigible provincial seeking shelter from the gathering storm underneath his absurd

umbrella - a symbol of inappropriate prudence.

For twenty years after 1945 most scholars joined in the ritual of denunciation. Even if they did not all agree that the war which broke out in Europe in 1939 was, to use Churchill's word, "unnecessary", there was no shortage of politicians or historians who believed that the "lessons of Munich" held good for all time.

Nearly twenty years further on, as these books testify, the climate of debate and discussion is rather different. It is not difficult to understand why the topic of appeasement continues to have a peculiar fascination, and is not exhausted, despite the amount that has been written. Of course, no one wants merely to swing the opposite direction and present "the appeasers" as far-sighted giants astride the diplomacy of their times. There is, however, a willingness to appreciate that appeasement must be considered at various levels. The choices confronting policy-makers now seem more complicated than once appeared, though that in itself does not exonerate them in all respects. Above all, perhaps, in a nuclear world, we are not so sure that the simple lessons sometimes drawn from the failure of the policy can be sensibly acted upon.

It is, no doubt, a mistake to enter into sustained negotiations except from a "position of strength", but what if the costs of that pursuit, over a different span of time, have generally debilitating economic consequences? And perhaps that pursuit, far from being the prelude to "meaningful negotiations" seems in practice to lead to no negotiations at all? These are the perennial problems of statecraft, but

their urgency in our own time makes all the more interesting a reappraisal of the origins of the Second World War. In these different ways, the books under review undertake just such an investigation.

Fuchser's book could not have appeared twenty years ago. This American scholar has made extensive use of the Chamberlain papers, consulted relevant Cabinet records and also interviewed, among others, members of the Chamberlain and Kettner (sic) families. Bumbling Neville is completely banished. Instead we are asked to believe in a ruthless and masterly prime minister, perhaps the most powerful in modern British history. The author has a strong urge to draw on psychological theories. It comes as no surprise to read that he attaches great importance to the supposed emotional deprivation of a child whose father (Joseph) was preoccupied with his own political career. We read too that the "loneliness and isolation of a public school could not but have had a significant effect on Chamberlain's mature personality". As always, "significant" is a marvelously evasive word.

Even if we are by no means convinced that the evidence advanced supports the structure placed upon it, the importance of this book lies in the proper emphasis it implicitly places on the role of individuals. So many powerful myths about "the appeasers" remain that any attempt to examine their performance as politicians is still welcome. Sadly, despite his valiant efforts, Fuchser cannot be said to be at home among the nuances of the English class and political system. The emphasis he places upon Chamber-

lain's ruthless determination to enforce his own will in the formulation and execution of policy might be more convincing if the author displayed a greater familiarity with the behaviour of other previous inhabitants of 10 Downing Street. And while we may derive some insight from the concept of "cognitive rigidity" as applied to Neville Chamberlain, we may wonder whether much is gained by placing him alongside Mao Tse-tung, Charles de Gaulle, David Ben-Gurion, Winston Churchill and John D. Rockefeller as instigators of generational discontinuity. It does seem, none the less, that we should pay particular attention to old men in a hurry.

A serious monograph is welcome on such a theme because recent scholarly work has concentrated upon very different aspects of the appeasement question. The conference held at Cumberland Lodge in May 1980 brought together many of the scholars most active in this field. Their deliberations have now been brought before a wider audience in *The Fascist Challenge and the Policy of Appeasement*.

The contributors are mostly writers with established reputations. Since the volume contains 28 papers, they cannot all be adequately noticed and even to select out some is invidious when the general standard is high. The German, French, British and American historians who took part did not, for the most part, merely regurgitate earlier writings. The international element adds greatly to the value of the collection, though there is no direct perspective from Eastern Europe. Taken as a whole, the price of publication makes this collection a bargain, for it is a

substantial volume.

The editors, Mommsen and Kettner, establish the general theme in their introduction. Misconceptions about Hitler and Mussolini did play a part in the decisions that were taken by the politicians, but it is misleading to suppose that matters can rest at this personal level. In particular, the problems confronting Britain were deep-seated and serious. Even if the appeasers and their advisers had displayed greater insight into the nature of the problems before them, it is far from clear that any alternative group of men would have been better at providing answers. As the title indicates, appeasement should not be thought of just in the context of British domestic politics. What needs to be explored is the relationship between the European "general crisis", the peculiar difficulties deriving from Britain's imperial role, and the specific exigencies of military or economic policy. These central themes are explored in detail.

The "general crisis" may be conceived as a "European civil war". Ideological alignments and allegiances in the 1930s could not be contained within the framework of the nation-state. Appeasement, therefore, is not simply a phrase in British policy, but something which arises out of the social and political tensions of Europe as a whole. The notion of collective security, even if there might once have been something to say for it, made little sense in a world where states did not contain harmonious and homogeneous populations. In practice, as various contributors make clear, politicians, soldiers and bureaucrats wrestled uncomfortably with the conventions of their class, the promptings of their consciences, their duty to their country and their desire simply to survive. The British Foreign Office was undergoing an identity crisis; one of many institutions appeared to survive, and men were uniforms which seemed to mean something, but perhaps they were hollow men with decisions effectively being taken elsewhere. In a European perspective, it was no longer clear who was one's "opposite number".

While the "structural malfunctioning" of Europe can be exaggerated, it is certainly the case that this aspect cannot be ignored. Nor can the assessments of economists, inside and outside government. Their views are analysed from a variety of standpoints. Incidentally, it is not the least advantage of this volume that its structure compels German scholars in particular to provide students with a crisp exposition of their views that is normally the case. Rearrangement might seem to "solve" the unemployment question, but was that only an illusion? Might the German economy simply go out of control, and might the British do likewise if foolish attempts were made to emulate German "success"? But, paradoxically, keeping the British economy "strong" for the "long haul" might fatally destroy Britain's chances of survival in the short run. So much depended on timing, and it seemed that British diplomacy had to be essentially reactive in character. There were the Dominions to be thought about. There was Singapore. There was Japan. And how strong was the Soviet Union as a military power, even supposing prejudices could be swept aside? Britain, in other words, shared in the difficulties of Europe, and considerable measure, but inevitably had a quite different set of perspectives in addition. Nowhere was this more evident than in the assessment of military needs and expenditures.

1939: a retrospective forty years later is less ambitious in scope and content, though, per page, it is considerably more expensive. Again, the perspective is international, though most of the contributors are British. The focus is on 1939 itself and different scholars look at events, as it were, from the significant capitals of the time - London, Paris, Berlin, Warsaw and Moscow. Though varying in tone and treatment, the exposures of diplomatic history. The editor tries to keep his contributors in line and adds his own final reflections. No good will be done, he concedes, by either eulogizing or condemning the men of the time, but might even be that by trying to understand their behaviour we might derive some ideas about how to avoid a repetition of the catastrophe. It can be said that all three volumes help us to

Throughout the nineteenth century, from the 1820s to the 1890s, the main aim of middle-class reformers, through a series of inquiries and commissions from the Aberdeen and Rosebury Commissions of 1826-31 to the Balfour Commission of 1882-90, was to create an alternative system of secondary schools for the middle class, linked closely to the universities,

which in turn would be made more exclusive by ending the traditional open door to all classes of all ages from 14 to middle life and replacing it by an entrance examination which favoured the middle-class products of the new secondary schools.

Guardians of the democratic tradition, led by a string of dedicated classics professors and by the Educational Institute of Scotland (1847) representing the traditional schoolmasters, fought equally hard on the other side, appealing to "the old boast of Scotland, that education of a sterling character was open to all ranks of her people, and that her Universities were truly national institutions".

The result was a compromise, as Anderson shows with a series of brilliantly deployed statistics. The rustic myth of the parish school, with Plato at the door of every enterprising son, was unimpaired, if indeed it ever existed, and replaced, especially in the larger towns, by a two-tier system of secondary education, an upper tier of endowed and more exclusive burgh schools for the better-off middle class, and a lower tier of "higher grade" schools built up in the 1870s, a decade or so before their English equivalents, on top of the primary burgh and parish schools. The road to the university now lay through the portal of the secondary school.

But, as Anderson's figures show, it was a wide gate, open to a wider range of society than the English or Continental universities. At a time when the latter were admitting a mere handful of working-class sons and

almost no daughters, at the Universities of Glasgow and Aberdeen in 1880-1910 working-class sons and daughters constituted from one in six to one in four of the students, a proportion not reached by the English universities until the mid-twentieth century. The "democratic myth" as expressed by a traditionalist in 1854, that universities should be "available for all grades of society - for all ages - for all intellects - for all attainments", was perhaps closer to reality in Victorian Scotland than it is in England today.

Harold Perkin

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BOOKS

Two-tier system

Education and Opportunity in Victorian Scotland: schools and universities by R. D. Anderson Oxford University Press, £25.00 ISBN 0 19 822696 9

The Scots have always prided themselves on their democratic education system. Ever since the Scottish Parliament's Act for the Settling of Schools in 1696 there has been a school in every parish, supported by the "heritors" (the substantial landowners), open to boys and girls alike, and with a salaried "dominie" or schoolmaster.

This has led to a powerful "democratic myth", that Scotland had a universal school system which put literacy within reach of the whole population, that the "lad o' pairts", however poor, could climb an educational ladder to the university and beyond to the national elite and the British establishment, that in the parish school all classes rubbed shoulders from the lord's and the minister's children to the shepherd's and the shoemaker's, and that the whole formed a national system of education without social barriers from the parish and burgh schools to the universities supported by the Scottish state.

Dr Anderson in this scholarly, perceptive and discriminating book sets out to test this historical myth, not to demolish it but to see how far and in what ways it fits the historical facts. Although it is far from being a thesis *ad hominem*, he is concerned to rehabilitate what can be saved of the Scottish tradition since the famous attack by George Davie in *The Scottish Intellectual* (Edinburgh 1961) on those Victorian Scots who sold out to an unprincipled and class-based Anglicized education and to the "middle-class" means of the original builders of the "democratic myth". His argument is that Davie, who was unsympathetic to an English-type specialization geared to the civil service and to the professions, was not so much wrong as unable to see, since he was not interested in, the more subtle changes which were going on in the schools.

There the parish schools, which had lived up to the democratic myth only in the countryside, and then only in certain regions like the Aberdeenshire hinterland, were unsuited to an increasingly industrial and urban society, and had lost much ground before the Victorian age began. In the towns, the equivalent burgh schools supported by the town councils had been supplemented by a range of endowed schools, originally intended for the poor but, along with the proprietary schools like the Edinburgh Academy, increasingly taken over by the middle class, who needed no coaching from their English counterparts in the arts of the English education for their own children and protecting them from "contamination" by their "inferiors".

Throughout the nineteenth century, from the 1820s to the 1890s, the main aim of middle-class reformers, through a series of inquiries and commissions from the Aberdeen and Rosebury Commissions of 1826-31 to the Balfour Commission of 1882-90, was to create an alternative system of secondary schools for the middle class, linked closely to the universities,

Reading problems

Achieving Literacy: longitudinal studies of adolescents learning to read by Margaret Meek, et al Routledge & Kegan Paul, £6.95 ISBN 0 7100 9465 9

Books on helping poor readers suffer from a constitutional weakness either they offer remedies, and can therefore be dismissed as simplistic, or they offer no remedies, and can therefore be dismissed as unhelpful. *Achieving Literacy* sets itself two aims: to answer the question "How

should secondary remedial readers be taught?" and to show what happens when teachers try. In a real sense no attempt is made to answer the question. One after another, recognized approaches to remedial teaching are tried, found wanting, and rejected. Norm-referenced testing, diagnostic testing, improvement of self-concept, reading "laboratories", reading development activities - all are dismissed as potentially futile or glib.

In describing how teachers can learn to be more effective at their job, however, the book is valuable. One teacher faces a massive conflict within her school over the approaches of the remedial and English departments; an English teacher fights to keep a poor reader out of a "sink" group; teachers use audio tapes and videotapes in order to share and deepen an understanding of how work with poor readers

Bentham's school project

Chrestomathia by Jeremy Bentham edited by M. J. Smith and W. H. Burston Clarendon Press: Oxford University Press, £40.00 ISBN 0 19 822661 0

Chrestomathia was reviewed in the first number of the *Westminster Review* by Thomas Southwood Smith. He wrote there: "It is truly encouraging to find the name of Bentham connected with this most important subject".

People are, of course, encouraged by the most unlikely things, yet neither when *Chrestomathia* was first published in two parts in 1815 and 1817 nor when Southwood Smith was reviewing it in 1824 was there any obvious cause for encouragement. The "important subject" of which it treats is secondary education, and the title of the work, typical Benthamite coinage, means "conducive to useful learning". It is, as the original subtitle declares, "a collection of papers explanatory of the design of an institution proposed to be set on foot under the name of the Chrestomathic Day School".

The description of it as a "collection of papers" (rather than a treatise and unified work) is ominously accurate. Its purpose was to promote an immediate and practical project, the establishment of a new kind of school in West London. As a result, it was merely the latest in a long line of projects sponsored by Bentham: plans for prisons, workhouses, taxation, currency, trains between London and Edinburgh, deep freezing of peas, a Panama canal, and so on. Since the single common feature of all these projects was that they had not come to fruition, the addition of the name of Bentham to this new project should have been little ground for encouragement. Mere induction would declare that the present design for a school would no more be translated into bricks and mortar than the previous lovingly designed panopticon prison; and, indeed, it was not.

The original proposal for the school derived from a group of Bentham's associates, James Mill, Francis Place, Edward Wakefield, and others. Bentham came into the project at a slightly later stage, early in 1814, when he bought shares in it and offered his garden in Westminster as a possible site. The general idea was to use the system by which the pupils acted as monitors and taught each other, the Bell and Lancaster system which was already being used at the primary

schools level, and to extend its use to the secondary school level thereby providing suitable education for the middle classes. The system of instruction was naturally of interest to utilitarian thinkers (as well as their prospective middle-class clients) in that it seemed to provide, as Bentham puts it, "unexampled cheapness of the instruction in proportion to its value". One master could in this way teach hundreds of children, particularly if, by repeating the general idea of the panopticon prison, he sat in the middle of the spider's web, watching everything that happened in the entire school spread round him.

Bentham retired to his newly rented west country estate and started to write *Chrestomathia*. He had James Mill with him as his secretary and a continuing example of the monitorial method of instruction before him in the way that James Mill taught his eldest son, J. S. Mill, Latin every morning and expected him to pass it on to his sisters in the course of the day. Soon, in typical manner, his thoughts and writing went far beyond the immediate purposes of the school. The first hundred of these are notes on the tables but the rest are appendices having little to do either with the immediate project or even with education.

In this year Bentham was indeed led into some of his profoundest thoughts about the nature of language, reality, and logic. Little of this, though, appears in the *Chrestomathia*; merely section 19 of Appendix IV. The main more abstract thought which does appear is the *Essay on Nomenclature and Classification* which forms about half of the whole work. Taking the whole of knowledge as his province, Bentham attempts to provide a natu-

ral, rather than a customary or traditional, classification of it; and to propose the principles of classification. In my opinion, the *Chrestomathia* is one of the most original and convincing in which the just mentioned short section on language and reality is a rare and welcome spring. One of the several ironies of this work is that although it proposes the replacement of a classical education by a scientific education, it then gives a classification of the sciences which virtually requires a classical education for its comprehension. For example, the "inadequate term geometry" is meant to be replaced by "morphoscopic posology", ethics becomes the "lematocopic pneumatology" and so on. Bentham envisages his Chrestomathic pupils catechising each other on the use of scores of such terms; scarcely the substitute for classical education supposedly desired by the middle classes.

Education was obviously an important topic for people wishing to change society in the way that the Benthamites wished to, and some of the principles embraced in this work, such as changing "tasks" into "play" have general validity. However, the desire to instruct cheaply led to the original collected edition of Bentham's works being published in double columns of tiny print. Here, in the new collected edition, we have *Chrestomathia* re-edited to legibility, lightly and carefully edited, and with a useful short introduction. On the other hand, since the best text the editors had to work from was that of the previous collected edition (edited by the enthusiastic, but also, for his time, notably careful, Southwood Smith), readers will not find here material that is not in that edition.

Rural changes

The Modernization of Rural France: communications networks and agricultural market structures in nineteenth-century France by Roger Price Hutchinson, £27.50 ISBN 0 09 145181 9

Six years after Eugen Weber's tantalizing discussion of the slow and complex transformation of rural France during the nineteenth century has been enhanced substantially by the appearance of Roger Price's masterly study.

The origins of this work are rooted firmly in Price's earlier textbook on *The Economic Modernization of France, 1730-1880* (1975), which emphasized spatial variations in internal transport systems and ways whereby these were improved in the nineteenth century. Building on these foundations, Dr Price has concentrated on communications networks and agricultural market structures, rather than probing with equal intensity the full sweep of psychological, social, cultural, political and economic factors intertwined in the concept of modernization. None the less, his approach is interdisciplinary, with methods and data that are familiar to economists, geographers and sociologists being incorporated, albeit with varying success. His real strength lies in assembling evidence derived from painstaking scrutiny of a wealth of material in Parisian record offices (national archives, war archives, railway archives and the national library), and an enormous array of books and articles. Apart from two tiny exceptions, provincial archives are not cited.

The book is divided into three major sections, dealing with food production and supply prior to railway construction; subsistence crises, popular misery and protest, and ways of alleviating conditions; and the impact of the nineteenth-century transport revolution on agricultural production and marketing. The section on change relates to the central theme of the book: they highlight the reactions of merchants, farmers, millers and bakers in times of food crisis and the desperation expressed by fearful consumers on placards and through popular protest and disorder. The later chapters are less successful, as it proves difficult to demonstrate the precise dynamic that linked changing transport systems to modifications in farm production.

Despite Dr Price's labours we still know relatively little about how knowledge of market demands was effectively diffused into the depths of the countryside, how farming households perceived new opportunities and reacted to them, and which mechanisms actually facilitated the transformation of peasant mentalities. Of course, Weber's synthesis illuminated some aspects, especially those relating to survival of tradition and nostalgia and continuity with the past, but the changing psychology and culture of French peasants and merchants in the decades between the Franco-Prussian War and the Great War still requires detailed attention.

Dr Price is clearly uncomfortable when dealing with statistics, and twice uses the same form of words to warn against placing too much faith in them unless other forms of evidence confirm that he then falls into just that trap, quoting untestable national averages and failing to correct for territorial variations and differences in category definition between inquiries. Despite this, however, he has produced a fascinating, illuminating and attractive book which will inform and stimulate researchers and advanced students of social and economic history and historical geography.

Hugh Clout

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Two histories of institutions have been published: W. W. R. G. F. Fitzwilliam College, Cambridge is published by the college at £15.00 (available from Heffer's Bookshop); *Four Centuries: Edinburgh University 1583-1983*, edited by Gordon Donaldson, is published by Edinburgh University Press at £10.00.

Colin Harrison

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Larger than life

F. E. Smith, First Earl of Birkenhead by John Campbell Cape, £30.00 ISBN 0 224 01596 6

Not every historical personality makes appropriate material for a biographical study. Some, like A. V. Dicey and Andrew Bonar Law, though worthy and admirable figures in themselves, do not inspire the reader to follow closely the pattern of their lives. But John Campbell has found a rich and rewarding figure in F. E. Smith, first Earl of Birkenhead, a politician whose life reads like one of those works of romantic fiction that F. E. himself succumbed to in his youth. From a politically aware but provincial background to the high offices of state, F. E. outlived his generation and even his great contemporaries by the sheer audacity of his rise to public fame.

His life had about it elements almost of tragedy. The man who might seem to exemplify the "high politics" theory of political behaviour (that politicians respond to and indeed create issues in accordance with their own ambitions) in the end damaged his career irretrievably by first opposing, then accepting, and then making it a principle of his political life to stand over the Anglo-Irish Treaty of 1921. Whether supporting Sir Edward Carson in 1914, or prosecuting Sir Roger Casement in 1916, or befriending Michael Collins in 1921, Smith remained a larger-than-life figure to the very end.

It would not have been surprising if John Campbell's subject had run away with his biographer, and a lesser historian might have fallen victim to the brilliance of F. E.'s personality and his talent for exaggeration. Many of F. E.'s stories about himself were of his own making; apparently unsatisfied with the remarkable truth about his career, he was prone to embellish. Campbell possesses the essential scepticism of the biographer: testing the evidence carefully, confronting F. E.'s boasts of insensibility, his tendency to over-react to criticism, his selfish extravagance, and above all, his frequent recourse to double standards. While he was not adverse to philandering, he found Marie Stopes's book on birth control disgusting. He urged his fellow-countrymen to offer their lives for sacrifice in battle, but his nerves would not stand the persistent danger: the western front, and his brief and comfortable war was waged through an alcoholic haze.

Campbell's biography is, however, more of a political and legal than a psychological study, and he is well qualified to analyse all the aspects of F.

E.'s official career. The political episodes in which Smith participated have been recounted many times, and inevitably perhaps Campbell has less to tell that is new; the legal chapters are more original. But he deals lucidly and sympathetically with the kind of Conservative Unionism exemplified by F. E. before 1914, and invites a reconsideration of the Liberal version of the crisis of British politics. Equally interesting is his placing of his subject in the political world of the time. F. E., like Churchill and Lloyd George, was a "bad party man". A most ferocious critic of his political opponents, he none the less hankered after a government of business efficiency which would pool British political talent in the interests of good government. Campbell reveals that F. E. was a significant figure in the making of an atmosphere of coalitionism that gradually developed to flourish in the ministry of all the talents in 1918-22.

Campbell shows that politics had an important public, as well as confidential, side. F. E.'s place in British politics does not lie in his governmental skills, though his natural ability to read rapidly and assimilate fully vast quantities of material, which served him so well in the law, made him a formidable enough minister. But his real talent was advocacy. In an era when crowds flocked to hear great public speakers F. E. was one of the main attractions. Campbell is surely right in sacrificing brevity in order to let F. E. speak for himself, for even today his utterances make exciting reading. Campbell's book is a timely reminder that politics is not only the art of the possible, but also the art of persuasion. And no man, in his day, could sway an audience like F. E. Smith.

Smith, of course, did not always mean what he said. But his political beliefs were coherent, and Campbell traces carefully the great issues on which F. E. was prepared to take a stand, irrespective of the damage inflicted on his ambitions. The Irish question is a good example of the Irish question. He supported Ulster's resistance to Home Rule, but he always acknowledged that Ulster's case for self-determination conceded the rest of Ireland's (and vice versa); and he never lost sight of wider United Kingdom issues. In 1921 he realised that Ulster, Irish and British interests must be reconciled somehow in a settlement which, while it did not destroy his career, left it broken-backed. But again Campbell does not canonize his subject, for he asserts bravely and honestly that Smith's role in the Anglo-Irish negotiations was at times one of deceit and calumny. Smith lost the substance of his career, but in reading this biography, as in reading Michael Collins's own death warrant, Campbell's biography is doubly interesting, in that it tells us about Smith the politician and about the nature of



A Punch cartoon drawn from 1910 entitled "Students on the Make", with the caption: Mr F. E. Smith: 'Master of Epigram - like me!' Mr Winston Churchill: 'Wrote a novel in his youth - like me!' Together: 'Travelled in the East like us. How does it end?'

the political life. F. E. was perhaps the last of the great breed of British public men. He was the Chamberlain of Liverpool, for, like the great Chamberlain, he always advised young politicians to acquire a firm local base. The age of the carpet-bagging, non-territorial MP, which the 1918 Reform Act ushered in, soon destroyed that political world, except perhaps in parts of Wales. If a Smith was the last of the Romans, then F. E. was perhaps the last of the great provincial political barons. But Campbell shows that F. E. retained to the end his ability to see starkly through the comfortable illusions characteristic of much of British political thinking, over India, and international relations, as over Ireland. Perhaps he was able to do so, precisely because F. E. was a player in a world still largely shaped by gentlemen.

Such a full and complex life could hardly be lived without irony and

paradox. F. E.'s existence was devoted to the pursuit of "glittering prizes". He had after all abandoned a profitable legal career in order to aim for the most coveted official positions; he made, against all prediction, a superb Lord Chancellor. But he was plagued by the growing realization that he had made no provision for his family, and it was perhaps fortunate for him (but not for his wife and children) that he was spared only a short time to pursue his undignified scramble for the financial security that his own nature had denied him.

John Campbell's biography, interestingly written and well illustrated, gives good measure to a man whose life was, as F. E. himself put it, "in fact, an adventure".

D. G. Boyce

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1939: a retrospective forty years later is less ambitious in scope and content, though, per page, it is considerably more expensive. Again, the perspective is international, though most of the contributors are British. The focus is on 1939 itself and different scholars look at events, as it were, from the significant capitals of the time - London, Paris, Berlin, Warsaw and Moscow. Though varying in tone and treatment, the exposures of diplomatic history. The editor tries to keep his contributors in line and adds his own final reflections. No good will be done, he concedes, by either eulogizing or condemning the men of the time, but might even be that by trying to understand their behaviour we might derive some ideas about how to avoid a repetition of the catastrophe. It can be said that all three volumes help us to

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BOOKS

Seems logical

Thinking, Problem Solving, Cognition by Richard E. Mayer
Freeman, £21.95 and £11.95
ISBN 0 7167 1440 X and 1441 8
Thinking and Reasoning: psychological approaches edited by Jonathan St B. T. Evans
Routledge & Kegan Paul, £12.95
ISBN 0 7100 9460 4

Despite the similarities in their titles, these two books epitomize the great divide between teaching methods in British and American universities. Mayer's book sets out to cover everything that might be included in a cognition course. He describes many experiments, adding just enough evaluation to enable students to produce neat assignments, without confusing their minds by suggesting that there are any unresolved conflicts. The lack of an overall framework means that some lines of research with quite different implications are presented side by side without comment while other theoretical approaches are scattered throughout the book. To take just one example, imagery appears as an aid for visualizing concepts in a chapter on induction learning; for solving transitive problems in a chapter on deductive reasoning; for carrying out "mental rotations" of geometric figures in a chapter on mental chronometry; for understanding sentences in a chapter on schema theory; and, finally, for testing mental ability in a chapter on intelligence. Nowhere is the general role of imagery in thinking discussed nor is there the slightest hint of the controversy about whether images have any status as mental phenomena at all.

The pages and index of Mayer's book are equally silent on other issues, such as the existence of logical competence, the extent to which thinking is conscious or automatic, and the relevance of artificial intelligence. In typically American style, the chapter on "creativity" training tells how children and students can be turned into better students by learning to abandon intuitions and feelings in favour of the conforming techniques which set high achievers on their way to the top of the educational system.

The strength of Mayer's textbook is its careful accounts of experimental techniques and procedures, so often glossed over, if not positively distorted, in secondary courses. By the end of the book the reader will have acquired a lot of detailed knowledge about thinking research but no feel for what all this research adds up to.

Thinking and Reasoning, a collection of readings edited by Jonathan Evans, is a beautiful example of the English belief that the best way of teaching students is by exposing them

to lecturers talking about their own specialisms.

The first five chapters in particular are like eavesdropping on a seminar held by Evans and his colleagues, all of whom know all there is to be known about a small number of reasoning problems. Readers who are familiar with P. C. Wason's four card, 246 and THOG problems, who know the ins and outs of syllogisms, disjunctive concepts and probability judgments, will find the contributions a fascinating read; outsiders may wonder what it is all about. Other chapters include P. N. Johnson-Laird's 1982 Bartlett lecture on thinking as a skill and yet another useful account of the imagery controversy by John Richardson. In the final chapter Richard Byrne has some interesting points to make about what people say aloud as they work through problems, claiming that these verbal protocols are valuable, not as introspective explanations of thought processes, but for the moment to moment detail they provide of a person's behaviour.

The basic dilemma for a researcher

in this area is that logic problems have one right answer which can be arrived at by correct inferential reasoning. But the abiding impression from the research is that there is no limit to the errors that people make. This has led the contributors to this volume to the conclusion that there is no such thing as a logical competence which will ensure correct reasoning on all occasions; instead psychologists should concentrate on the factors that determine actual performance. Many ingenious experiments have tried to tease out what types of thinking underlie errors and what makes some versions of problems with identical logical structures easier to solve.

However, despite their strictures against the laws of thought reflecting the laws of logic, these researchers still cannot help thinking of reasoning tasks as involving basic thinking processes. From the vantage point of complete insight into their own battery of problems, it is hard to resist regarding people's erroneous solutions as evidence of faulty - if not illogical - reasoning. When Johnson-Laird prop-

oses the manipulation of mental models as the type of thinking involved in inferential reasoning, he is still left with the problem of why some people realize that constructing alternative mental models is necessary to deal with the more difficult syllogisms, while others do not. Even if we accept that inferential ability is based on constructing mental models rather than on an appreciation of logical rules, some individuals still seem to have a lot more of it than others.

It is perfectly admissible for someone taking part in a general knowledge quiz to say that he does not know the answer. Yet in one of these logical problem tasks it would be considered odd if a "contestant" gave a "don't know" response. But can it be said that someone who has been trained in logic, or indeed has had the four card problem explained to them, faces the same problem as a novice? All the evidence quoted in this book goes to show that people are influenced by past experiences when tackling problems, some of which may be helpful, some not. The real skill of the good

problem-solver is deciding what kind of a problem he is faced with and dealing with it appropriately.

Of course the question of why some people are so much better than others at selecting the right techniques from their stored repertoires remains a mystery. Is it due to the ability to take in more complex relationships in the first place; is it due to better organization of long-term storage, leading to better retrieval; or is it due to constraints on working memory while actually working on the problem? Whatever the explanation may turn out to be, the undoubted link between prior knowledge and problem-solving is demonstrated by the fact that two contributors to the Evans volume quote with approval Rumelhart's statement that "understanding the problem and solving it is nearly the same thing".

Judith Greene

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Limits on linguistic options

The Articulate Mammal: an introduction to psycholinguistics (second edition)
by Jean Aitchison
Hutchinson, £5.50
ISBN 0 09 150921 1

Some books should not be revised. The first edition of Aitchison's *The Articulate Mammal* has won a good deal of admiration since it first appeared in 1976. It was clearly written and covered a wide range of important issues in both developmental and experimental psycholinguistics in a reasonably accurate way. Some simplifications were inevitable, but the author's obvious pleasure in producing the book and her attempt to reach a wide and varied audience made these easy to forgive.

In this second edition, Aitchison has been well alone for the past part, but has added a few substantial sections, as well as numerous paragraphs and updated references throughout, the intention being to provide some indication of what has happened during the past seven or eight years. In order to evaluate the success of these revisions, it is necessary to take some stance on the nature of the most notable developments in the field during the past decade. Inevitably, there is room for disagreement on such matters.

From my perspective, the most important shift during recent years has been one which has firmly re-located linguistic theory at the centre of psycholinguistic research. After the successes of the 1960s in applying concepts originating in transformational linguistics to problems in language development and in the comprehension and storage of sentences, psycholinguistics became fragmented in the 1970s, with a loss of focus on major issues. This is not to say that there was no progress in this decade, but research often had a peripheral air and the wider significance of many results was often obscure.

Although it would be an exaggeration to place all of the responsibility for this on the shoulders of the linguists, I do feel that this fragmentation was partially the result of a failure by Chomsky and others to clarify their views on how linguistic theory might contribute to psycholinguistic research. Starting about 1975, we find Chomsky again explicitly disavowing the role of linguistics in the study of the human mind, and, since then, there has been substantial clarification of some fundamental issues. In saying this, I am totally at odds with Aitchison who suggests that Chomsky's proposals on these matters "have become somewhat vaguer". On the contrary, I believe that both methodological and substantive clarity have been achieved in a number of ways.

First, it has become apparent that when Chomsky talks about linguistics as a branch of cognitive psychology, he does not understand the latter expression as denoting what people calling themselves cognitive psychologists do. Modern cognitive psychology maintains an experimental methodology and emphasis on behavioural measures.

Second, it has become apparent that

ment, inherited directly from behaviourism and indirectly from Wilhelm Wundt. Wundt, however, like Chomsky, was a methodological pluralist, firmly believing that some psychological questions, because of their complexity, could not be approached experimentally. Although this is not exactly Chomsky's position, he does insist that experimental data have no privileged status and that it has been a major failing of this century's psychology to assume otherwise.

Second, with the articulation of the notions of core grammar and modularity, and the view that languages, in the sense of what we speak and hear, are not constitutive of a natural kind, but are epiphenomena, resulting from the interaction of a number of cognitive modules of which the language module is only one, Chomsky has gone some way towards developing a view on the relationship between grammar and the comprehension and production of language. Of course, it will not be enough for many and, indeed, I would not wish to minimize the difficulties of filling in details, but in the recent formulations, I do discern more clues than in the 1960s presentation, which still dominates Aitchison's discussion.

Contemporaneous with these developments in Chomsky's ideas, it is possible to discern the beginnings of a move away from the fragmentation of the 1970s. This is particularly true in developmental studies, where increasing attention, both in conceptual and empirical work, is being paid to learning ability and the logical problem of language acquisition. Much of this has been stimulated by the parameter setting model of language development according to which the child's innate language faculty makes available only a small number of options in the form of parameters to be fixed by linguistic experience. Furthermore, some of these parameters may be related by implication in that fixing the value of one of them may automatically fix the values of others, thus reducing the necessity for large quantities of complex linguistic experience.

Aitchison does make slight contact with these issues, when discussing the H. Matthai's work on the comprehension of sentences including reciprocal pronouns, but this work is not adequately set in context and she fails to consider alternative interpretations for his results. To be fair, it seems to me that Aitchison could probably not have written a book based on the first edition of *The Articulate Mammal* which took adequate account of the issues I have mentioned here. Starting with a model which assigns fundamental roles to transformations and other rules, rather than to levels of representation, does not yield a simple passage to the parameter setting approach. But without some such treatment, the value of the updating becomes questionable. Speaking personally, I do not see the post-Washburne primacy research, admirably described in a new section by Aitchison, as indicative of where psycholinguistics is going.

I would rather Aitchison had turned her very real talents to a new introduction than attempted to fix up an out-of-date one.

Martin Atkinson

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BOOKS

Finite elements

Finite Element Primer
by Bruce Irons and Nigel Shrive
Ellis Horwood, Wiley,
£16.50 and £6.50
ISBN 0 85312 271 7 and 440 X
Finite Elements: an introduction for engineers

by R. K. Livesley
Cambridge University Press,
£17.50 and £6.95
ISBN 0 521 24314 9 and 28597 6

Finite Elements for Electrical Engineers
by P. Silvester and R. L. Ferrari
Cambridge University Press,
£20.00 and £7.95
ISBN 0 521 25321 7 and 27310 2

Finite Elements and Approximation
by O. C. Zienkiewicz and K. Morgan
Wiley, £9.50
ISBN 0 471 89089 8

Several substantial engineering consultancy firms owe their very existence to the commercial viability of finite element packages that have taken in excess of two hundred man years to produce. Any authority with a bridge or a dam to construct seems to need a computer model before committing themselves to the real thing. The disastrous failures of certain box girder bridges a few years ago provide graphic reinforcement of the need for extensive modelling before actual construction.

Finite element models can be used in most areas of continuum mechanics. It does not matter whether the problem concerns solids or fluids: if the material is assumed continuous (unlike a bucket of sand), then its behaviour is governed by differential equations, for example, the equation of continuity, the equilibrium of internal stresses, or the conservation of momentum. Fluids are not the only flows that are modelled in terms of partial differential equations. Problems involving acoustic or electromagnetic flux also fit into the same general formulation, and it is frequently only the names of the variables that change. In general, the problem is easy to state and it is known that a solution exists, but for one reason or another - complex shape, nonlinear material properties - it is not possible to determine the exact solution explicitly. Finite element techniques are one very popular group of methods for obtaining approximate solutions to such differential equations. They replace the differential equation by a large number (10,000 is not unknown) of simple algebraic equations. The purpose of the finite element computer package is to automate the setting up and solving of such large systems.

The mathematical approximation is to divide the domain of the problem into small non-overlapping elements and then to make certain simplifying assumptions about the form of the solution within each element. The structural approach to problems in mechanical engineering is to view the mathematical partitioning of the problem as equivalent to a physical subdivision in terms of small plates, slabs or beams. The method of finite elements, however, has a much wider appeal and it does not have to be restricted to structural applications.

In many structural mechanics problems, the solution sought is that which minimizes the total potential energy of the system. This minimization principle, known as a variational principle, provides an alternative formalization of the method. Thus, it is possible to view the single finite element approximation as an approximate solution of a differential equation, or as an approximate minimization of potential energy. For most applications to fluid mechanics and in many time-dependent problems, no such variational principle exists and so books that concentrate on the variational formulation and exclude the differential equation formulation, known as the Galerkin method, do not provide a true picture of the scope of the method.

Computer models, however, have their limitations. As finite element methods developed, it was soon found that it was all too easy to generate meaningless computer output. Even when relying on engineering judgment

and experience it was possible to generate numbers that were rubbish. In many instances dangerous rubbish, because to the relatively untrained eye they appeared to be plausible. Practising engineers had to know when to trust their solutions and when to throw them away and try again.

Irons and Shrive aim to provide a short-cut to wisdom by cataloguing failures as well as successes. Their book and that by Livesley are analogous from structural analysis to explain and justify the various tricks and short-cuts that have been found to work. Their faith in the mathematical rather than the physical basis of the method is minimal and it follows that the applications of their books are therefore restricted.

There is, however, a completely different (non-structural) sphere of applicability for the method. Viewed as a method for solving differential equations, finite elements have a considerably wider appeal. If the method is to be applied successfully to, say, petroleum reservoir simulation or computational aerodynamic dynamics, it is essential that the true mathematical structure of the method is understood.

Silvester and Ferrari have also produced a book that details the non-structural applications of finite elements, but it might be argued that it is even more specialized than that of Livesley. At the end of the first chapter, in the section suggesting further reading, they outline a very good case for the introduction of more integrated engineering degree courses: they observe that while finite element textbooks written for structural engineers are more or less worthless in the hands of electrical engineering

students, it is no great leap to step from the basic differential equations of one discipline to those of the other. They also point out that finite element methods have been used to solve potential problems for as long as they have been used for structural problems, although one unique contribution of the structural engineers was the name "finite elements".

The success of the method in structural analysis has been largely based on the wisdom of the practitioners concerned. If the same techniques are to be used in fluid dynamics, disaster beckons: fluids do not behave like structures and the apparent similarity of the governing differential equations can lead to a totally unwarranted over-reliance on defective intuition. Zienkiewicz and Morgan go a long way towards a more balanced approach for engineering undergraduates. They avoid an emphasis placed, in the other two books, on computational simplifications based on the behaviours of simple structures. Their treatment, however, is unlikely to satisfy a more mathematical reader, who may search in vain for convergence proofs and error analyses. On the other hand, the book will be useful for engineers seeking to extend themselves and their software beyond the well-trodden fields of structural analysis.

Irons and Shrive adopt a highly individual approach to writing their book. They take considerable liberties with the English language and adopt a somewhat light-hearted approach. Although this would certainly enliven the presentation of lectures, it is inappropriate in a textbook. The details omitted from a lecture for the sake of a brighter presentation must, in a

textbook, be stated clearly and unambiguously. The authors attempt to impart the essence of years of engineering experience and expertise while assuming a readership with an almost total lack of mathematical sophistication combined with a substantial knowledge of engineering principles. This book is restricted to applications in structural analysis, and an attempt is made to link it with a specific computer package available from the authors.

In complete contrast, Livesley has tackled the same area from a much more traditional viewpoint. Using the standard textbook approach, he has attempted, for engineering undergraduates, to broaden the scope of the applications to include fluid flow problems. One curious aspect of his book, however, is the restriction of the study of time-dependent problems to two exercises. Surely, if the subject is worth including at all, it warrants a full chapter.

It is possible to view the book by Silvester and Ferrari not as a finite element text, but as a work on electromagnetics in which the examples happen to be solved by finite element methods. With a few exceptions, they formulate the approximations via variational principles, leading to a number of unnecessarily complicated examples for which the Galerkin approach would have been more appropriate.

One positive feature of this book is the inclusion of integral equations. Many problems in potential theory can be formulated either as a differential equation over some region or as an integral equation defined only on the boundary. The integral formulation has many advantages, particularly for

exterior problems such as air flow past an aerofoil, magnetic field around a conductor or acoustic radiation from a vibrating body. In such problems, the boundary is finite but the domain of the differential formulation would be unbounded.

Unfortunately, but not unreasonably in view of the title, the presentation here is based on electromagnetics and the alternative applications of the integral formulation are not mentioned. More significantly, the actual finite element solution of the integral equations is discussed only briefly. In other applications the integral formulation, coupled with a finite element solution, is known as the boundary element method and so a little cross-referencing here would have been an advantage.

Zienkiewicz and Morgan, in a much more complete text, have attempted to provide a broad mathematical framework for the finite element method. In so doing, they manage to embrace finite differences and a wide range of computing techniques. Basic methods are introduced from a slightly unusual direction: in view of the vastness of the finite element literature, this is a positive asset. Particularly noteworthy is the chapter on variational principles, although some of the other chapters are less successful. Taken as a whole, however, the book is a worthwhile addition to any library of finite element books.

Richard Wait

Richard Wait is a senior lecturer in the department of statistics and computational mathematics at the University of Liverpool.

Logic gates

From Logic to Computers
by P. J. Thewlis and B. N. T. Foxon
Blackwell Scientific, £6.95
ISBN 0 632 01183 1

As one of a new series designed to cover different hardware and software aspects of computer science and computer engineering at an elementary level, this book by Thewlis and Foxon, both of whom are in the school of mathematics, computing and statistics of Leicester Polytechnic, aims to introduce hardware and circuits aspects of computers and computing. As no specialist knowledge of electronics or gates are required or assumed, the book would therefore be appropriate for advanced level students in secondary schools, undergraduates in their first year at polytechnics and universities, and for individuals interested in a basic introduction to the subject.

The book begins with a very simple introductory chapter to combinational Boolean logic gates, which form the basic building-blocks of all present-day digital systems, illustrating the principles of logic AND, OR and NOT. The book then moves on to the design of logic gates by simple mechanical switches which are either on (closed) or off (open). These concepts are then incorporated in standard logic gate symbols which are then used in the rest of the text. The notation of Boolean algebra to express combinational logic relationships is also introduced, together with simple input/output truth tables.

Chapter 2 describes the fundamental techniques used for manipulating and simplifying Boolean expressions for combinational functions, a desirable realization does not contain an excessive number of logic gates. The Venn diagram, which is of minimal practical use, is first considered, followed by the more useful Karnaugh map construction. It is a pity, however, that the chapter is split almost 50:50 between these two graphical representations, with possibly an inadequate introduction to the Karnaugh map for readers working on their own. Also, there is no mention of the limitations of graphical methods when the number of independent binary input variables exceeds, say, four.

The following chapters proceed to introduce the basic structure of a computer system, initially in terms of boxes which contain a central processing unit, input peripherals, output peripherals, memory, and so on. Realization of data in the form of different numbering systems, simple logic arrangements providing full



Late Classic (AD 550 to AD 800) jadeite mosaic vessels from Tikal in Guatemala. From the fourth edition of *The Ancient Maya* by Sylvanus G. Morley and George W. Brainerd, revised by Robert J. Sharer and published by Stanford University Press at \$28.50.

Natterjack sites

The Natterjack Toad
by Trevor J. C. Beebee
Oxford University Press, £9.95
ISBN 0 19 217709 5

Anyone who has seen this delightful little animal will be distressed by the fact that in the first 75 years of this century the number of known natterjack sites in Britain has declined from 107 to a mere 20. Although the new Wildlife and Countryside Act of 1981 provides marginally better legal protection than the 1975 Act described in Dr Beebee's short book, the natterjack remains an endangered species in Britain.

The numbers of all three indigenous British frogs and toads are in fact declining, the natterjack arguably being the least important: being less

widespread, its loss would cause less impact on the country's ecology. However, this would be to deny the particular appeal of the natterjack and the importance of rarity per se in the conservation ethic.

Dr Beebee, one of the leading authorities on British amphibians, convincingly attributes the natterjack's decline to loss of dune and heathland habitats, and he provides an excellent account of desirable rehabilitation measures, which are already proving successful at several sites. Unfortunately, however, the habitat is no longer economically important; there are serious conflicting pressures, especially afforestation and recreational development.

If the conservation effort is to receive public support, a much larger proportion of the public must be made aware of the toad's existence and become concerned about its plight. Although this book goes a long way towards addressing this problem, there is a dilemma. Increased awareness depends to a large extent upon the public's access to natterjack territory, which might conflict with conservation efforts. Herpetologists are understandably preoccupied with the essential first step of preservation, but conservation is just as much concerned with benefit to people (and their appreciation of animals) as with survival of the animals themselves.

Beebee sometimes gives the impression that the areas occupied by natterjacks should be preserved for the toad's sole benefit, talking gloomily about conflicts with horticulture and golf courses. These interests, however, are not necessarily opposed to those of the conservationists, and a policy of multiple use might resolve the problem. In fairness, Dr Beebee does make passing reference to the plant and animal communities of which the natterjack forms a part, but he stops short of proposing a management plan which would cater for the integrated needs of herpetologists, other naturalists, and the general public.

In addition to the key chapter on conservation, this well-researched book includes information drawn from the entire geographical range of the natterjack. Each aspect of the toad's biology is considered, but only in so far as it digresses from the characteristic amphibian pattern. Under anatomy, for instance, there is no attempt to cover the general structure of the skeleton, blood system, and so on. Also, as a contribution to the academic literature, the book's value is impaired by the absence of reference citations in the text and by the failure to include some reference sources in the bibliography.

R. S. Oldham

R. S. Oldham is senior lecturer in ecology at Leicester Polytechnic.

Nonverbal behaviour

Body Movement and Interpersonal Communication
by Peter E. Bull
Wiley, £12.50
ISBN 0 471 90069 9

The area of research into nonverbal behaviour, social skills, body movements and interpersonal communication has had a long history. Darwin wrote about the expression of emotions in man and animals in 1872 and the topic was popularized, some 100 years later, by Desmond Morris.

Many British researchers have made a lot of the experimental and theoretical rumbling in the topic and the research has been widely applied - in areas as diverse as advertising, management training, marital counselling, and most areas of mental health. The key issue is that nonverbal behaviour is not simply a luxurious piece of mime that runs parallel to the verbal content of social behaviour; rather, it is an essential additional channel through which many kinds of socially significant information are conveyed. Pure messages are conveyed or "leaked": the intent of verbal messages can be

supported, amplified or negated by its nonverbal accompaniments.

Dr Bull's book offers an evaluation of research on body movements by considering the various types of information conveyed by bodily cues. Body movement is discussed not only in relation to emotion, speech and differences between people but also in the context of liking, relationships and various specific social contexts like premarital and interview. All stages the strengths and weaknesses of the methods and theoretical claims of various investigators are carefully assessed.

The book is an extremely scholarly one. Careful analysis of concepts, methods, theories and results is provided throughout, and no flaws or weaknesses seem to escape the author's critical and methodological scrutiny. The frequent academic judgments made on the basis of such analysis seem convincing and authoritative whether they refer to a specific study, a single idea or a whole area of work. In short, it is an excellent example of scholarship "as she is spoke".

To some readers, however, I suspect that this strength might also be seen as a weakness. It is easy to feel that like a prebendary and his vicar, the book is established in a tradition which has been shown to have its weaknesses or every theoretical position can be undermined. There is a danger, therefore, of

the book being read this way - but not by the audience for which it was intended. It is clearly meant as an addition to the advanced literature rather than as an attempt to popularize. It successfully clothes the naked ape in its academic robes and vestments.

Taken for what it is, then, the book must be judged a success. Its discussion of the research on pupilometry is very searching and it gives exemplary consideration to individual differences in the complementary skills of encoding and decoding (that is, showing what you feel) and decoding behaviour (that is, working out what other people feel). Undergraduates might model their work on its patient, meticulous and well-judged style. Readers other than the academically adventurous, however, will find it rather dry but nevertheless clear and orderly.

The study of nonverbal behaviour is one that leads to practical benefits in many areas of life. It is an applicable topic. This book will be a useful sourcebook for all those who wish to learn about how the research is done and the pitfalls they should avoid.

Steve Duck

Steve Duck is editor of the *Journal of Social and Personal Relationships* and a senior lecturer in psychology at the University of Leicester.

forms may be obtained from the Assistant Secretary (Personnel) (TJ/SS) at Parkbank College, Main Street, London, W12 0BB, or by telephone 01-818 6664 ext. 133. Otherwise applications (in duplicate) including full C.V. and names of two referees should be sent to the Assistant Secretary (Personnel) by post on or before 1 February 1984.

Applications giving details of qualifications and experience and names of three referees should be received by 1 February to the Principal, Edmund Hall, OX1 3AR, from which further particulars and application form may be obtained.

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The Council of the Hong Kong Polytechnic invites applications for the post of Director which will become vacant at the end of 1984 when the present Director retires after a period of almost twenty years' distinguished service in the development of the Polytechnic. Applications for this post are expected to be able, if invited, to attend a preliminary interview in March/April and a final interview in Hong Kong in May/June 1984.

The Hong Kong Polytechnic, established in 1972, is a tertiary education institution substantially funded by the Hong Kong Government through its University and Polytechnic Grants Committee. It has a large measure of autonomy under its own governing Council, the majority of whose members are drawn from the commercial and industrial sectors of Hong Kong. The Director is a member of the Council and the chief executive of the Polytechnic.

The Polytechnic offers a wide range of courses at different levels and on different modes of attendance. Academic awards range from the technician level Diploma to the technology level Professional Diploma and first degree. It has at present a full-time equivalent student population of 12,150 comprising 7,200 full-time day students and 2,000 part-time students by head count. It currently employs some 850 full-time teaching staff. Development proposals recently presented to the Grants Committee envisage an increase of full-time equivalent student enrolment to 13,500 by 1987/88, of which 2,200 will be on degree courses.

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Application forms and further information are obtainable from the Secretary General, Association of Commonwealth Universities (Acad), 25 Gordon Square, London WC1H 0PF. Completed application forms should be submitted by 15 February 1984 with the first copy to the General Secretary, Hong Kong Polytechnic, Hung Hom, Kowloon, Hong Kong, and the 2nd copy to the Association of Commonwealth Universities.

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Polytechnic

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